# FOPULION VOL. II. NO. 4 JANUARY 1948

UNITED BUSINESS EDUCATION ASSOCIATION

## In This Issue=

Office Machines Training

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#### JANUARY 1948 1948

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CIRCULATION CORRESPONDENCE should be addressed to Hollis P. Guy, Executive Secretary, United Business Education Association, 1201 Sixteenth Street, N. W., Washington 6, D. C. Checks should be drawn payable to United Business Education Association and mailed to the Executive Secretary. Membership in the Association is two dollars per year, \$1.50 of which is for a year's subscription to the UBEA FORUM. Two dollars per year to non-members. Single copy 35 cents.

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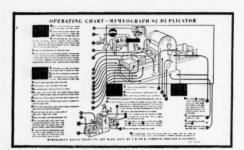
UBEA Forum

J. FRANK DAME 12 East Chelton Avenue, Philadelphia 44, Pennsylvania

The UBEA FORUM is published monthly except June, July, August and September by the United Business Education Association, A Department of the National Education Association of the United States, 1201 Sixteenth Street, N. W., Washington 6, D. C. Entered as second-class matter March 27, 1947, at the post office at Washington, D. C., under the Act of March 3, 1879. Additional second-class entry at Baltimore, Maryland.

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# Editorial Statement and Presentation

Those engaged in the business of educating for business are continuously confronted with the problem of "to do" or "not to do" something about office machine training. It is quite confusing to attend a meeting and have a business man express the viewpoint that such training is not essential. Even though this attitude is expressed now and then it appears quite likely that the larger number of employers of office personnel desire the adaptability in workers that comes from contact with mechanical devices that may be found in the modern office.

It would appear that there are two approaches to the possible solution of this seeming dilemma.

The easiest and at the same time most objective approach is that of justifying such training on the basis of specific need in the community. Thus, if it be found on the basis of community survey that a particular type of machine is much used then the *ideal* would be to work out a placement plan whereby certain numbers of trainees would secure work of this particularized nature. The further enhancement of this ideal would be the adoption of a cooperative plan whereby part-time work experience could be practiced by students who are being trained along these rather specific lines. Through such a procedure the student adjustment would be rendered most complete and practical.

The more difficult course to defend is that of the general acquaintance type of machines class for which no immediate proof is present that any of the various machines will actually be encountered by the student. At first this might appear to be a questionable point of view, but it must be remembered that while this latter type of course appears easy to defend, such easy defense is based quite definitely upon a philosophical point of view.

The materials so wisely selected for this issue of the *Forum* by Dr. Meehan place especial emphasis on some phases of machine training that are much too often neglected in all types of schools.

J. FRANK DAME, Editor

Dr. James R. Meehan holds degrees from Rutgers University and New York University. He has taught in the secondary schools of Elizabeth and Newark, New Jersey, and in the summer sessions at a number of universities. Hunter College in New York City claims him as the head of its Department of Business Education and he is currently serving on the executive board of the E.B.T.A. Many articles contributed to periodicals and yearbooks as well as the authorship of "How to Operate the Calculator and Comptometer" confirm the view that he is a specialist in the field of office practice as well as in teacher training.



Issue Editor JAMES R. MEEHAN



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## UNITED SERVICES

OFFICE MACHINE TRAINING

JAMES R. MEEHAN, Editor Hunter College, New York, N. Y.

## THE OFFICE MACHINES EDITOR COMMENTS

For the past forty years office machines of many types — computing machines, listing machines, duplicating devices and dictating machines, to name but a few, have been utilized by business firms to increase the production of their clerical employees. A survey conducted in the Philadelphia area ten years ago revealed that the ratio of typewriters to office machines in that region was at that time approximately two to one. Today the ratio is probably more like three to two because modern business firms can no longer afford to pay the high unit cost of manual clerical operations. If the use of an office machine will double the output and increase the accuracy of a clerical worker, the cost and maintenance of the machine becomes a relatively unimportant factor.

Business educators have long recognized the need for some type of office machine training but they have not been in agreement as to the amount nor the kind of training to be offered. Perhaps the greatest error made in the past has been that of treating all office machines as if they are as nearly alike as are typewriters. Office machines are not at all alike. They differ in almost every respect - in construction, functions, in the amount of operating skill required as well as the time needed to acquire the operating skill. No one has given more thought and concrete applications to the entire office machine training problem than has Professor Agnew of New York University. He has pioneered in the selection of office machines and the preparation of all types of instructional materials: manuals, operational charts, textbooks and films. His article should be of interest to all office machine teachers on both the high school and collegiate levels whether they be in the secretarial, clerical practice or in the accounting departments.

At least four distinct types of office machines are taught in the three divisions of the business education department: duplicating machines, transcribing machines, calculating and listing machines, and bookkeeping and billing machines. As a classroom teacher Miss Lewis offers some very practical suggestions as to the types of duplicating machines to be taught in the secretarial division and the important points to be stressed in such a training program.

Machine transcription or voice writing was once limited to one type of machine, the wax cylinder recorder. Now there are any number of disc and wire recorders in the machine transcription field. In her article Professor Potter evaluates all types of transcribing machines. She also considers the knowledges and skills needed for a competent operator.

As educational director for the Monroe Calculating Machine Company Mr. Bryan is thoroughly familiar with the business application of all types of calculators, listing machines, and accounting machines. His suggestions, coming as they do directly from the field of business, should be invaluable to all office machine teachers. The skill to be acquired on a listing or calculating machine has a definite bearing upon the time devoted to the machine. As a general rule we have given too much time to the relatively simple operation of a listing machine and not enough time to the great variety of problems which may be solved with the aid of the calculator.

Mrs. MacClain describes a transcribing machine course based upon her experience as an expert operator. She has also competed in professional typewriting contests and it will be recalled that she has appeared in the Navy Department films produced during the war by Commander Dvorak. Her suggestions for the dictator should be of real assistance to the transcribing machine operator.

As his article indicates Mr. Norman H. Weiss is in charge of a most complete and modern bookkeeping machine laboratory at Central Commercial High School in New York City. He has made a real contribution to bookkeeping machine training by pointing out both the similarities and differences among all types of bookkeeping machines. He provides for three levels of training, namely: (1) acquaintance, (2) basic or fundamental operations, and (3) vocational competency. It will be noted that the highest degree of skill acquisition is covered in approximately one hundred hours, a much shorter training period than the three hundred hour course recommended by most bookkeeping machine manufacturers.

It is hoped that business teachers will welcome the material presented by the contributors. Their articles are of timely interest to office machine teachers everywhere.

## UNITED SERVICES-

GENERAL CLERICAL

HELEN BORLAND, Editor University of Colorado, Boulder

#### **OUR SCHOOL TAKES A LOOK AT ITSELF**

Contributed by Nellie M. Phillips, Southwestern Junior College, Keene, Texas

The Business Education department that trains students for a wide-spread employment market has a problem of curriculum and evaluation quite different from the department whose graduates find their employment market chiefly in the immediate locality. Immediate and close contact with the employer or the student is generally impossible, and that casual day by day evaluation through such close contact with a local employer and ex-student group on which so many schools depend is not possible. Even the check of the work-experience program is out of the question for many such schools, for they must provide work-experience for students within their own organizations.

#### Assessing Values of Offerings

The Business Education Department of Southwestern Junior College of Keene, Texas, found this problem of assessing the value of its officings especially difficult. As a junior college, the dual purpose of training for immediate employment and for further study in a senior college presented the problem in curriculum construction common to all junior colleges. As a denominational college whose students quite generally take employment in field offices of the denomination, its employment market is nation-wide, with very little contact with employers.

To remedy this latter difficulty, and to gain a picture of the work of the department as viewed through the eyes of graduates and employers, a study was made through questionnaire and rating sheets sent to both groups. The following procedure was used. The "Pen and Pad Girls" of Southwestern Junior College were organized about 1943. Since that time the girls in training have, as a class project, sent out regularly a little newsletter which they call The Transcript. The girls out in the field offices appreciated this opportunity to receive news from their college, and cooperated very well in carrying on the project by returning information requested and writing letters. Along with the issue which went out about Thanksgiving time, 1946, were sent return postal cards on which Pen and Pad Girls wrote and returned addresses of as many former secretarial enrollees as they knew about. Many former enrollees were not on the active mailing list. The plan and purpose of

the investigation was explained in this news letter.

Early in February, a questionnaire was sent out with the newsletter. Returns were received from 15 states and 2 foreign countries, and represented 18 different types of business, both denominational and non-denominational, with educational, church, medical, and insurance offices predominating. A 90 per cent return from the questionnaires was finally received, with many letters that assisted materially in the survey, and many opportunities were revealed for possible follow-up assistance to graduates.

In the meantime, certain denominational offices were chosen at random from over the United States and were asked to supply information as to the qualifications and characteristics considered particularly important in workers in specific types of office work. These offices included medical offices, college offices, publishing houses, one radio school office, and church offices. From these questionnaires, an 82 per cent return was received.

As soon as the questionnaires were received from former students, a rating and criticism form was sent to their particular employers. The same form was sent to employers in the college offices of the campus, in which students were doing practice office work.

#### **Business Office Requirements**

In the returns from the field offices, giving qualifications for employment, the personal qualifications emphasized were dependability, cooperation, carefulness, adaptability, good judgment, neatness, promptness, and honesty.

In the information given by these offices as to general qualifications for employment, a puzzling inconsistency appeared between the listing of machines used in the offices, and the qualifications for employment. The office machines in use were typewriters, adding machines, calculators, voice-writing machines, eash registers, Mimeographs, checkwriters, Addressographs, and fluid duplicators, with infrequent mention of billing machines, gelatine duplicators, and printing machines.

The general qualifications for employment listed by the field offices were ability to type rapidly and accurately, knowledge of bookkeeping and arithmetic, competent handling of the mechanics of the English language (spelling, punctuation, grammar), ability to compose letters, and ability to type figures and tables. In addition to these primary requirements for the pretraining of employees, ability to file, to handle mail, to operate the Mimeograph, to take dictation, to handle people were listed.

## UNITED SERVICES

#### **GENERAL CLERICAL**

Qualifications set up for employment sometimes tend to become those things in which the office find applicants generally lacking, and items in which applicants are quite generally well-trained tend to be minimized in the minds of employers unless a system of job classifications and descriptions has been set up. On the other hand, skills in which the office is accustomed to train employees because of a general lack of pre-training tend to be omitted from a list of qualifications for employment. Either explanation might account for the lack of stress on machine skills in the list of qualifications. This indicates that, in similar studies, a question should be included relative to the in-service training given by each office.

#### Weaknesses in School Training

In the rating sheets received from the employers of the graduates, chief criticism was directed against the inability of these students to cut stencils and operate the Mimeograph, to file, to use the voice-writing machines, to type and transcribe rapidly and accurately, to write legibly, and to punctuate correctly.

These employers found the students lacking principally, as far as character traits were concerned, in qualities of originality, forcefulness, leadership, and breadth of interest, and rated them highest on qualities of adaptability, honesty, neatness and attractiveness, industry, carefulness, promptness, and dependability. This result might be judged another straw in the wind of criticism against vocational education in general—that schools are training dutiful employees, and failing to train in those traits that encourage leadership.

#### Student Criticisms

The graduates themselves listed their principal duties as the meeting of people, copy and figure typing, filing, transcribing, mimeographing, composing letters, machine calculation, handling mail, and voice transcriptions, although they listed a total of some 35 quite varied duties.

(Continued on page 50)

BASIC BUSINESS

HAROLD GILBRETH, Editor Winthrop College, Rock Hill, S. C.

## GENERAL BUSINESS IS VITAL TO A COMPLETE BUSINESS TRAINING PROGRAM

#### Contributed by John H. Hall, Brookline High School, Brookline, Massachusetts

Business educators are inclined to think of their field as divided into two phases: 1) vocational preparation, and 2) the group of subjects known as general business, social-business or basic business. This classification is logical and inevitable, and its use simplifies the formulation of the objectives of the various business courses.

Useful as these categories may be, however, there is danger in the situation if teachers and administrators of business programs begin to take sides on the value of vocational versus general business education. Such division is certain to lead to the claim by one side that vocational preparation is the valid and fundamental purpose of business education and that social business materials are inferior in value or merely something to fill out the program.

Business education will prosper best and serve its stu-

dents more effectively if all teachers appreciate the place and importance of general business. The subjects of this field have much to offer in broadening the educational experience of students pursuing programs of vocational business preparation as well as other curricula of the school.

Briefly stated, the most valuable contributions of the general or social-business subjects are these:

- 1. Strengthening of the programs of vocational business preparation through the teaching of background materials not provided in the skill subjects.
- 2. Strengthening of the programs of all students of the school by providing knowledge useful for adjustment to the business world in which all American citizens live.
- 3. The breaking down of the barrier that exists between the business department and the rest of the school by attracting non-business students into the department. There should be no stigma attached to the business curriculum and there will be none if students from all departments of the school discover the

(Continued on page 43)

## UNITED SERVICES

#### DISTRIBUTIVE OCCUPATIONS

WILLIAM R. BLACKLER, Editor California Bureau of Business Education Sacramento, California

## SUPERVISORY TRAINING IN DISTRIBUTIVE OCCUPATIONS

Contributed by Willis M. Kenealy, Regional Supervisor, Distributive Education, California State Department of Education

Supervisors, division managers, buyers and department heads are key people in distributive organizations. The quality of their work largely determines the effectiveness of the entire operation. In general, their responsibilities include: (1) Instructing workers, (2) Leadership and morale building, (3) Detailed knowledge of work done under their supervision, (4) Improving methods, (5) Planning, organizing and supervising work, and (6) Knowledge of their place, duties, and relationships in the business firm.

It is the obligation of the business firm to make provision for training supervisors to perform these responsibilities in a satisfactory manner. Many firms are asking the vocational training departments of the local schools and the state departments of education to assist in this training.

Types of Training: There are three general types of supervisory training programs in distributive occupations. These are: (1) packaged programs, (2) conferences, and (3) combination of conferences and instruction.

Packaged programs, the first type, are so-called because the content has been carefully developed and validated for particular supervisory needs. The instructor follows a leader's manual which gives in detail the instructional material which is to be presented in each meeting. In addition, the manual also carries full instruction to the leader regarding the exact way in which the material should be presented and the meeting conducted.

Experience has shown that maximum value can come from a packaged program only if the instructor has been carefully trained in the use of the manual. This is usually done by means of Leader Training Institutes.

In all of the packaged programs the same general procedure is followed, namely, instruction and demonstration by the leader, followed by practice by group members

With reference to the second type as used in training supervisors in business firms, a conference means a discussion held under the guidance of a skilled leader who understands and uses the various well-recognized techniques of stimulating, directing and controlling group thinking in the analysis and solution of a common problem. Special training of the conference leader is important if optimum benefits are to be derived from this type of training program. This training is usually secured by means of a Conference Leader Training Institute where instruction and demonstration in leading conferences is followed by practice in conference leading by the members.

The third type of supervisory training in distributive occupations is a combination of conference and instruction. In programs of this type the primary function of the leader is to reach a predetermined objective of training by means of instruction material presented by him, and through group discussion on the problems involved. A leader's guide is followed and extensive use is made of visual materials such as sound slide films, charts and posters. Hand-out materials and summaries are also employed.

The above is a brief general description of the three types of supervisory training programs. Each will be considered in some detail.

#### Packaged Programs

Job Instruction Training: This program is designed to teach a supervisor how to instruct a new worker or an experienced worker on a new job. This is done by presenting the "Four Step Method in How to Instruct." These steps are: (1) prepare the learner, (2) present the job, (3) try out performance, and (4) follow up. The program also includes instrution on the preparation of a job break-down which is used by the supervisor in teaching the learner.

Job Relations Training: The primary objective of this program is to present a pattern for handling the human relations problems which confront a supervisor. Following is the pattern which is developed by the leader and used throughout the five two-hour sessions. 1. Get the facts-review the record, find out the rules and customs and talk with individuals concerned for opinions and feelings. Be sure to get the whole story. 2. Weigh and decide - Fit the facts together, consider their bearing on each other, check practices and policies, test each possible action against the objectives, consider effect on individual, group and volume of work. Don't jump to conclusions. 3. Take action — Are you going to handle this yourself, do you need help in handling it, should you refer it to your supervisor? Watch the place and timing of your action, don't pass the buck. 4. Check results - how soon will you follow up, how often will you need to check, and did your action help production? Watch for changes in output, attitudes and relationships.

#### DISTRIBUTIVE OCCUPATIONS

Job Methods Training: An important responsibility of the supervisor is to improve methods of doing the work under his supervision. Job methods training is a ten-hour program designed to assist the supervisor in meeting this responsibility. This is done by presenting the principles governing work simplification and dramatizing their application in a work situation. The steps covered are (1) break down the job, (2) question every detail, (3) develop the new method, (4) apply the new method. Members of the group analyze a job they are responsible for doing in terms of the above and develop and present an improved way of performing the work. The follow-up consists of continued application of the principles involved in department situations together with suggestions to management for improvements.

#### Conferences

It has long been recognized that each member of a discussion group benefits from the exchange of ideas. When a number of persons have the same problems, it has been found that a group attack helps to bring out solutions that are generally acceptable to the members. Also, there is a saving of time through group discussion over each person working independently.

The conference method is not new. It has been used for a considerable period of time in business, industry, and education. Its value in group solution of problems has been proved time and time again. Today, there is increasing interest in the use of conference techniques in the consideration of problems faced by supervisors in distributive occupations.

There are four essentials of a conference, (a) a group, (b) one or more problems, (c) a leader, (d) a meeting place. The group should be homogeneous with regard to rank and classification and limited to a number that will promote maximum participation by the members, usually fifteen to twenty. The problems which are best suited to conference discussion are those in which the group feels, (1) the need of a solution and, (2) that they have the necessary background and information for their solution.

The leader is the key individual in the success of a conference. He does not tell the group what to think or dictate the results of their thinking. Although he has planned a method of attacking the problem or problems to be considered by the conferees, he has no program of his own to put over. Under no circumstances does he set himself up as an expert on the matters being discussed. His functions are to plan, promote, interest, lead, direct, inform, interpret, encourage, stimulate, referee, judge, moderate and conciliate as occasion demands, and record the results of the group thinking.

Problem-solving Conferences: Most conferences for

supervisors in distributive occupations deal with the solution of pressing problems. Conferences of this type are developed along the following steps or phases: (1) problem, (2) facts, (3) conclusions, (4) plan, and (5) action.

The problem must be clearly stated with its meaning and terms clarified by the leader. The gathering of pertinent facts is a major phase of a problem-solving conference. In this step the leader encourages maximum contribution of every member and records these facts upon a blackboard or large sheets of paper in front of the group.

The third step, the showing of conclusions, follows a critical analysis and evaluation of the material on the conference charts. A plan of action is developed upon the basis of the conclusions. Action on the plan takes place following the meeting, and in accordance with the plan.

Frequent checks on the results of the action are taken by the group members or management. Follow up conferences are frequently used for this purpose.

Techniques of Leadership and Supervision: Conferences dealing with qualities and traits involved in effective supervision and leadership are frequently used in training programs for distributive occupations. At the first session of a series of this type the group and leader, in response to the question—"What qualities are required to be recognized as a leader?" accumulate a list of desirable leadership qualities and traits.

Each item on this list is then discussed from the standpoint of its personal application and its possible development in those supervised. Consideration may also be given to negative traits, the elimination of which serves to increase the effectiveness of the supervisor and build good-will with the working force. A plan or pattern for personal development is usually included in training programs of this type.

#### Combination of Conference and Instruction

This third type of program which combines the use of conference and instruction is receiving increasing recognition and use in the field of supervisory training in distributive occupations. It consists of a series of meetings in which the leader follows an outline in presenting basic material on supervisory problems. The leader also pools group experience and thinking on these problems by use of the conference method. Each meeting combines prepared instruction material on pre-determined topics, with the results of group consideration and discussion on these topics. Members of the group are thus able to compare and check their thinking with accepted principles and procedures.

Following are topics which are included in a program

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#### SHORTHAND

THELMA M. POTTER, Editor Teachers College, Columbia University 525 W. 120 Street, New York 27, N. Y.

## YOUR STENOGRAPHY PUPILS DON'T KNOW ENGLISH?

Contributed by Harold E. Cowan, High School, Dedham, Massachusetts

SHORTHAND EDITOR'S NOTE: Mr. Harold E. Cowan, of the High School in Dedham, Massachusetts and an active worker in teachers' organizations, reports here a self-imposed project, the results of which will deprive any transcription teacher who says "What do they teach them in the English Department?" of that convenient alibi for lackadaisical transcription teaching.

We hope Mr. Cowan's study will serve as an inspiration for other such projects. Perhaps someone will take the next step and tell how he teaches to eliminate the kinds of errors Mr. Cowan

We teachers in our zeal to impel perfection in our students by controlling human frailty and replacing it with concentration and strength, are likely to make innumerable complaints to explain why we do not attain student perfection. We say among other things:

"Our students are very deficient in technical English, that is, word usage, punctuation, plurals, tenses, sentence and paragraph structure. The English department should do more of this and less of that."

Well, it is pleasant to have someone to blame for what we do not like, and why not blame those English teachers? But, let's see how much blame we can actually load onto their graceful shoulders.

What prompts this attempt to break into print is a little self discipline, a project which I handed to myself to make a study of transcripts, to determine how far English figures in transcription errors. Errors of course we must have. If our young folks made no errors, many of us would be engaged in some of the other lines of vocational effort which statistics tell us pay so much better than ours, instead of in the job we love.

#### Evidence from One School

All the evidence I have comes from only one school, my own, the Dedham High School, from about fifty-five stenography seniors, divided between the graduating classes of 1946 and 1947. Starting in the fall the stenography teacher has assigned one girl to my office for a week, then replaced her with another one the next week, and so on. In the fall of 1946 I decided to find out where and when these girls made transcript errors and what kinds they were. I dictated slowly, not intentionally, but because it is necessary to dictate slowly if one is to compose each letter differently, and not all in a repetitious patter. Also I redictated as many times as a girl asked, and spelled every name on request. I did, however, leave it to the girl to look up the spelling of all words except names.

I thought if these student-stenographers were to run true to the usual misconception, they should make mainly grammar, spelling, and punctuation errors, that is, they should make mainly those errors which the English department could prevent by better attention to fundamentals. But, let's see how it all worked out.

In the period of two years 642 errors were checked off. My correspondence is heavy, including school matters with the commercial department, and freshmen attendance and scholarship, with semi-school matters like an E. B. T. A. membership drive, our neighborhood Commercial Directors Club, and a tremendous amount for the UNITED-NOMA Business Entrance Tests, and with a few outside activities such as Dedham Historical Society, and Rotary. So, out of approximately 900 letters, about half the number, 450, had 642 errors. Here is what they were: Thirty per cent of the errors are changes of words, or tense, or the addition or omission of a word, some of which changed the meaning of the sentence and some did not, but all of them have to do with faulty hearing, or faulty reading of notes. In a school building with corridors lined with steel lockers, echoes frequently handicap accurate hearing. Faulty writing or reading of notes brings about similar errors. Examples are:

Mrs., Miss, and Mr. interchanged Union school (for evening school) ours, yours interchanged our own printing reasonably (for recently) shall and should interchanged General Business Education (for Journal of) Easter Commercial Teachers Association (for Eastern) 3700 entrances (for entrants) text and test interchanged

#### "Jibberish" Errors

Nineteen per cent of the errors are what may be called "jibberish," simply "writing something" when the transcriber is uncertain of the shorthand notes. Examples are:

at the end of the Secondary School School (for Course)

for fully Noma discussion (for strictly)

be a crude (for have accrued)

there will not be out over five more sessions

to secure a commercial employment with you

we have no funds for distribution of our tests with charge (for without)

It must be recognized that some of the errors called "jibberish" appear at first glance to be errors in Eng-

#### SHORTHAND

lish, for instance, the last three just above. Yet, they cannot be English errors, because the transcribers when asked to read the particular sentences, immediately knew there was something incorrect. They had read and typed words, not context.

#### Spelling and Typewriting Errors

Fourteen per cent of the errors are apparently careless spelling and typing errors of two kinds. In some cases the stenographer spells a word incorrectly, but when we simply call attention to it, she says, "Oh yes, I did not realize I made that mistake; I know how to spell it." Examples are:

br (for be)

end (for and)

into the hand's of the printer (for hands)

varing (for varying)

The second kind of error is taking a chance on spelling, and occurs mostly in proper names. The dictator may have spelled the name but the stenographer wrote it down in shorthand instead of longhand. Or the dictator may not have spelled a name because he thought it a familiar one. Examples are:

Hiannis (for Hyannis)

Deleware (you know what for!)

South Bridge (for Southbridge). Page Lester Brigham, our genial friend at the American Optical!

Dear Mr. Handsome: (for Hansen) (If you know Bill Hansen, of Landers, Frary and Clark, New Britain, you may realize that the girl was correct in a manner of speaking!)

Eight per cent are simply careless copying of addresses. For instance, the dictator says, "a letter to Miss Warren" and gives to the stenographer a magazine on a page of which Miss Warren's full name and address appears, and starts "My dear Priscilla"; the stenographer conjures up a salutation, "My dear Miss Priscilla." In most cases, however, the errors in this eight per cent were not errors in judgment, but in reading and typing.

Already we have used up 75 per cent of our errors and we have not yet pinned inefficiency onto our English department. That won't do, they must be delinquent somewhere!

Eleven per cent of the errors are in spacing, punctuation, and capitals, purely English functions. Examples are:

Bethune-Cookman (for Bethune-Cookman)

period instead of a question mark

use or omission of commas obviously (not just in questionable cases)

Eight per cent of the errors are in spelling and dividing, and are due to the fact that the transcriber could not spell the word, and either took a chance or did not realize her shortcoming. Thus, at the end and beginning of lines we get such division as han dicap and spellings which we know were not simply accidental because when the transcribed had the word called to her attention she did not recognize it as misspelled.

Four and a half per cent of the errors are in incorrect paragraphing and sentences. Two paragraphs are run together in spite of the fact that they deal with things not germane, and in spite of the dictator having said "paragraph."

Four per cent of the errors are those of set-up and erasing. The letter is placed too high, too low, or the side margins are unbalanced. Erasures are carelessly made, and the smudges remain.

One and one half per cent of the errors are just plain grammatical ones, misplacing the word "only" so that instead of the dictation

"We are interested in only the amount of work—"becomes

"We are only interested in the amount of work—" an obviously incorrect use of a tense, as in a letter dictated in *March*:

"this Spring we operated the test program in April, May and June."

So, there you have it—three fourths of the errors are those which bear no resemblance to English living or dead, and one fourth are definitely due to faulty English.

Altogether I am well pleased with the transcripts. Remember, that the first stenographer each Fall was one who had only recently come back from the vacation following her junior year, the next one came to my office a week later, and so on. These people have a right to make mistakes in shorthand and transcription. I do not mean, however, that because the total amount of work is good the work of each pupil is good. In every class, except a highly selective one, we find some folks who are just not stenographic material. They may be the ones who make too many errors in English, and who have reached the point of decreasing utility in the study of the mother tongue. They may be the ones who cannot rise above transcribing word by word, phrase by phrase, and are certain to type faulty context, and either do not observe the inconsistent prose, or if they notice it, are unable to figure out what is correct. They are people who will never make stenographers.

Many of our stenography students in any school will not become stenographers because of lack of ability. Many more will not become stenographers because of lack of jobs for them. But — we can't blame the English teachers!

#### **TYPEWRITING**

JOHN L. ROWE, Editor Boston University School of Education

## TYPEWRITING AS A CORE SKILL IN CLERICAL TRAINING

Contributed by Christian Walter Ehnes, Head of Business Department, Brookline High School, Brookline, Massachusetts

Typewriting Editor's Note: The increasing mechanization of business requires more clerical and office machine workers, and it is to the high school that business will turn for a large number of these workers. In positions of this type, typewriting is the core skill or activity. In this article, Mr. Ehnes has shown the relationship of typewriting skill to clerical activities. He suggests numerous teaching procedures in the typewriting class that can be of great help in training more efficiently for the clerical and office machines courses.

Typewriting is too often considered merely another subject in its own right, and not in the light of a basic core skill in clerical training. When one considers that the offices turn to the high school for most of their beginning clerical workers, it immediately becomes apparent that subjects in our curriculum which train for this field of endeavor should be in line with the demand. Typewriting, the first and most popular skill subject in the high school business curriculum, offers much that is basic to many clerical workers as well as to typists. Proper instruction in typewriting establishes skills and concomitant learnings that are equally applicable to advanced clerical training, such as filing and office machine operation.

Learning to typewrite is considered too frequently as a purely mechanical affair, a simple process, or as a method of memorizing the keyboard to be followed by practice for the development of speed. It is more than this; it is one of the most exacting types of learning; it is the ability to make use of the fundamental skills and applying them to office situations. We must, therefore, teach this subject from the standpoint of basic skill training in typewriting, and realize the carry-over between typewriting and specialized subjects in clerical training.

#### Relationship of Typewriting Skill to Office Machines

Skills learned in typewriting may be applied to numerous office machines such as the Mimeograph, duplicator, Addressograph, adding machine, key and crank driven calculators, bookkeeping machine, Ediphone, Dictaphone, Soundscriber and Audograph. There is a definite carry-over of manual dexterity acquired in typewriting to the crank and key driven calculators, billing and bookkeeping machines. Touch typing results in

touch manipulation of the key driven calculators and billing machines. The ability to read accurately, the power to concentrate for a long period of time, and the ability to maintain muscular coordination required to strike the keys, are applicable to both the typist and the office machine operator.

The habit of doing work accurately on the typewriter is a core skill and carries over directly to all production work performed in duplicating and stenciling jobs. Such skills in typewriting as the proper use of tabulating, vertical and horizontal centering, alignment, copying from rough drafts are also basic to duplicating work.

Aside from the purely manual skill of typewriting as it applies to the acoustical and the new electronic office machines, such minimum skills acquired in typewriting as the application of types of letters and placement, correction of errors (erasing, spreading, and filling in), folding and inserting letters, adressing envelopes, making carbon copies, tabulating, writing on ruled lines, and card writing, are definitely carried over into nearly every phase of clerical work.

In typewriting, the student has acquired certain definite routine work habits and ideals of systematic procedure, neatness, honesty, and responsibility in his work. These skills are also the foundation of one of the major fields of clerical tasks, namely that of filing. The student becomes fully aware in filing that typewritten material in itself is extremely important evidence, but that equally great is the responsibility of inspecting, reading, sorting, arranging, indexing, coding, and filing the material systematically for safe keeping and future reference.

When one considers the aims and objectives of learning to typewrite, he accepts at the same time fundamental long-range skills applicable to almost all other subjects associated with clerical training. Let us consider the skills fundamental both to typewriting and clerical training, namely office machine operation.

#### Skills Fundamental to Typewriting and Clerical Training

First, it is important to develop the proper technique in the operation of the machine. Developing operative skill for efficient manipulation of the typewriter should be emphasized at the outset. The typist learns that in order to type well he must observe rigidly the following:

- 1. Practice persistently.
- Maintain proper mental attitude toward the work being typed or what is more frequently termed concentration.
- 3. Have proper coordination of muscular movements.

#### **TYPEWRITING**

4. Apply rhythm and continuity of movement in performing machine operations.

5. Be analytical of carelessness.

The mere matter of memorizing the keyboard to be followed by practice for the development of speed and accuracy is not the ultimate objective of typewriting. Correct habits of operation are developed while practicing, but there can be no degree of *marketable* skill unless the learner knows how to apply his typing skill or his machine training to business situations—otherwise the preliminary training without a knowledge of how to apply it will have little value to him.

In brief, the student who types ninety words a minute has typing skill; likewise, the student who has acquired the ability to copy manuscripts, tabulations, letters, and payrolls has typing skill. However, the manipulation involved in operating a typewriter is more complex in the average office position. Machine skill is only truly effective if it can be applied in a variety of office situations. For example, the ability to take statistical data in an unassembled form and to tabulate it properly with a reasonable degree of facility would be a test of job ap-

plication.

This dual function of machine skill applies not only to good typing but equally as well to the use of most machines in clerical work. When the student is ready for training on other office machines, manipulation skill has already been established through the development of exact habits of machine (typewriter) control.

As soon as the student has mastered the keyboard and the service mechanisms of the typewriter and has learned to appreciate the fact that this subject has more to offer than merely "striking keys," he is then ready to practice the application of fundamental typing skill to concrete office jobs and to develop a reasonable degree of clerical typing ability. In other words, the operative skill in the efficient manipulation of the typewriter has been accomplished and at the same time the student has attained efficient habits and techniques for all office machine work. The teacher, however, should see that his training is complete by helping him apply his skill to actual office situations.

Second, typewriting aims to develop the ability to type with accuracy and speed. The more thoroughly one masters his machine, the greater will be his skill. Assuming that the student has covered the keyboard, he is now ready to develop further skill by learning to typewrite words, phrases, sentences, paragraphs, and finally the application of these skills to the numerous business forms. In this phase of typewriting, the student acquires a basic knowledge applicable to clerical training. Typewriting is also basic core skill for clerical work because of its constant play with English. There is an excellent opportunity to apply the fundamentals of English

through spelling, punctuation, grammar, composition, syllabication, and vocabulary to the many phases of clerical work.

Third, the student should be taught that one of the most important requisites in becoming a good typist and clerical worker is the acquisition of clear and concise reading ability. Complete word recognition should be taught in typing and must formulate a part of the clerical worker's skill.

The habit of proofreading all work carefully is another objective realized by the superior typist and definitely is essential in all clerical work, especially in duplicating and stenciling. In typing, the student is taught how to proofread with care. He must be taught that work presented to him must be completed with exactness, and that attention must be given to minute details. He learns to look for errors in stroking, errors in spacing, and omissions. He checks for meaning, structure of sentences, and spelling. He also becomes familiar with the more common proofreader's symbols so that he can type from rough drafts when necessary.

#### Providing for Transfer

The instructor of typewriting should present skills in such a manner that they will transfer to all those important aspects of clerical work wherein typewriting is a basic core skill. The teacher should be cognizant of the following correlations between typewriting and clerical training and whenever possible to teach for specific transfer:

- 1. The development of operative skill and manipulation of the typewriter is applicable to a great extent to the number of office machines associated with clerical training. Proper muscular coordination is necessary for typewriting and equally necessary for any office machine operator. Aside from merely applying manual skill such as striking keys in proper sequence, the typist, as well as the office machine operator, must be accurate and proficient.
- 2. In typing, concentration is an absolute essential. Failure to concentrate on the material being typed results in errors. The accurate typist must center his thoughts on the tasks at hand; he must be mentally conscious of the work being typed no matter how small or unimportant it may seem. A conscious recognition of the actual meaning and punctuation of the word at hand is a must with the superior typist. He has learned to keep his mind on the work at hand, to begin promptly and energetically, and to carry through unswervingly—often within certain limits. Thus, he has established the habit of concentration which is essential to accurate and efficient work whether it be on the typewriter or on some

(Continued on page 44)

#### BOOKKEEPING AND ACCOUNTING

MILTON C. OLSON, Editor Ball State Teachers College Muncie, Indiana

#### COLLEGE ACCOUNTING TODAY

Contributed by J. Everett Royer, Assistant Professor of Accounting, University of Miami, Coral Gables, Florida

The increased enrollment in the colleges and universities throughout the country due largely to the influx of veterans has posed many instructional and administrative problems. Some of these problems are most critical in the areas of accounting and business administration as thousands of veterans seeking practical, vocational training register for these courses. (Editor's note: At Ball State Teachers College 34.5% of the 1,109 veterans enrolled during the Fall term of 1947 were majors in the Department of Business Education.)

#### The Problem of Large Classes

To meet the problem of tremendously increased enrollment it has been necessary in some institutions to organize classes of from 60 to 150 and more students. To give effective accounting instruction in classes of this size is very difficult. Unfortunately, many of the students are in these classes only because they think they will like accounting and not because they have ability to do the work. If the unfit could be eliminated the problems would be eased to a great extent. The elimination is carried out at the end of the course rather than at the beginning by means of the failure marks that are assigned. This procedure is expensive and painful both to the student and to the conscientious instructor. Therefore what can be done to keep the failing student out of these accounting classes, and to guide him into some field where he can be successful?

#### Selection of Students

At the University of Miami a serious effort is being made to select as accounting majors only those who have the necessary capacity for success in this field. If a student performs poorly in a mathematics placement test, he is required to take a course in general mathematics before he may take accounting. If it is felt as a result of this test and other factors evident in his background of training and experience that his chances for success in accounting are poor, the student is encouraged to delay his accounting work until his sophomore year so that he will be in a better position to decide whether or not he really wants to go into this field of study.

The aptitude test published by the American Institute of Accountants has been given to students who

have completed one year of accounting work. The scores on this test have been compared with the scores made on the final accounting achievement examination and these were found to show correlation. It would be difficult to ascertain if the correlation would have been as high if the aptitude test had been given at the beginning rather than at the end of the year. The correlation of scores on the mathematics placement test already mentioned and the accounting achievement test was also high. In addition, the results on an entrance test stressing vocabulary and reading comprehension given to all new students also revealed a high correlation with achievement scores in accounting.

In a way, these are hopeful signs. As a result, it is hoped that predictive data can be refined to the point where they will be of greater help in aiding students to plan their work.

#### Accounting for Those Not Specialized in Accounting

Another partial solution to the problem is to set up separate courses for those who do not intend to specialize in accounting and who therefore do not need the same type of technical accounting knowledge and skill as those who specialize in this field. The University of Miami inaugurated a policy along these lines beginning with the fall semester of 1947. A coordinated series of courses designed expressly for the student who does not expect to practice accounting as a profession were offered. These courses aim to give a knowledge of accounting that is needed in those fields of business where an intelligent understanding of accounting is indispensable to the effective understanding of business operations. A second series of courses is offered for those who wish to specialize in accounting work. These two series of accounting courses differ considerably in content and emphasis.

The student who insists on majoring in accounting in spite of warnings that his path will be rough is placed in the introductory courses for non-accounting majors so that he can find out more definitely if he really wishes to continue. If he maintains a high average in the quality of his work he is then allowed to transfer over to the curriculum for accounting majors.

#### Making Instruction of Large Classes Effective

With a large class, the instructor will in all probability use the lecture method of presentation. Student questions are held to a minimum or excluded entirely. With many papers to check, a thorough scrutiny of home work or problem assignments becomes impossible, so this job is either not done, or is delegated to student assistants.

(Continued on page 20)

**BOOK REVIEWS** 

JESSIE GRAHAM, Editor Supervisor Business Education Adult and Vocational Education Division Los Angeles City Schools

## THE ORGANIZATION AND OPERATION OF A CLERICAL PRACTICE LABORATORY

V. A. Frisch, Monograph 68, South-Western, 1947, 43 pages (paper bound).

Although it is difficult for one teacher to organize a class laboratory on the exact plan followed by another, the teacher who has this guide will have a sense of security in starting a class for which every detail has been carefully planned. She can follow these procedures step by step, making needed changes to suit the local community. She will know that the plan set forth in the monograph has been followed successfully for nine years.

In this book, nothing is left to chance from the "Good morning" of the teacher to the final instructions in the carrying out of a project. All are in black on white. Lists of supplies and equipment, a floor plan, the forms needed—everything is included.

As clerical practice fills the needs of a large group of students, the course is becoming more and more popular. This compact result of one teacher's experience will find a place in many classrooms.

## MATHEMATICS OF BUSINESS AND ACCOUNTING

Kenneth L. Trefftzs and E. Justin Hills, Harper, 1947, 267 pps. and tables, \$3.

This book is intended as a text for an introductory course in Mathematics of Business on the college level. Feeling that the majority of students who plan to major in business do not have an adequate knowledge of the basic principles of mathematics, the authors have emphasized elementary arithmetic operations and presented algebraic principles used in business. They have included many applications of these fundamentals to business and accounting.

In addition to the above, the book contains a chapter on logarithms and the use of the slide rule. Other chapters contain an elementary presentation of compound amounts, present values, annuities and applications of annuity principles to bond yields and values.

This book should be well received by both business teachers and business leaders.

> Roy T. Culey, Chairman Business Administration Department Los Angeles City College Los Angeles, California

#### THE PSYCHOLOGY OF RUMOR

Gordon W. Allport and Leo Postman, Holt, 1947, 247 pages, \$3.50.

Rumor analysis, like propaganda analysis, is a fascinating subject for study. In this basic textbook, the authors consider rumor spreading as a social and psychological problem of major proportions. Rumors can sap morale, menace national safety, and raise extravagant hopes.

Although the bibliography gives evidence that several articles and books on rumor are at hand, this is the only textbook devoted to the psychology of rumor. It is easy to see that this study is applicable to any of the social sciences and the social-business subjects—in fact, to any subject, as the ability to distinguish between fact and rumor is the basis for thinking.

The authors describe the experiments made in rumor spreading and arrive at a formula—the amount of rumor in circulation will vary with the importance of the subject to the individuals concerned times the ambiguity of the evidence pertaining to the topic.

The motives for the circulation of rumors are discussed, the kinds of rumors are listed with statistics as to their frequency, and the changes made in the rumors as they are spread are analyzed. Cases are presented for analysis and other cases are cited so that the reader may try his hand at analysis.

The benefits to be derived from a study of this subject during these days of conflicting reports of happenings, of groups arrayed against groups, are obvious.

## UNESCO: ITS PURPOSE AND ITS PHILOSOPHY

Julian Huxley, American Council on Public Affairs, Washington 8, D. C., 62 pages. Cloth, \$2; paper, \$1.

The International Society for Business Education has been reactivated this year. Indeed, in this interdependent world, business educators, with all other citizens, *must* be thinking about education in other countries.

Guides to what each individual can do now are these books on UNESCO. In them will be found a clear-cut statement of the aims of UNESCO and a step-by-step program to be followed by each individual in the training of youth for peace and for international understanding.

## UNITED SERVICES-

#### **BOOK REVIEWS**

#### UNESCO AND YOU

The United States National Commission for UNESCO, Department of State Publication 2904, September, 1947, 42 pages, free.

#### ON THE WAGING OF PEACE

William G. Carr, National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D. C., July 1947, pamphlet, free.

The NEA Delegate Assembly was so impressed by Dr. Carr's address delivered at its annual meeting that the group voted to have it printed for distribution to members. Dr. Carr, associate secretary of NEA, served as an adviser to the U.S. delegation to the second session of the general convention of UNESCO in Mexico City.

#### COST ACCOUNTING, SECOND EDITION

Clarence L. Van Sickle, Harper, 1947, 889 pps., \$4.

The emphasis of this book is on the relationships that

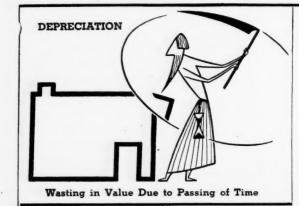
exist between cost accounting and the various phases of manufacturing, marketing, and administrative management.

The text can be divided into three parts, the first dealing with cost applications, cost factors, and cost elements. The second part discusses the process cost system, job cost system, and standard cost system. The third part treats specialized phases of cost accounting, including differential costs, marketing costs, and budgetary

The numerous problems and theory questions have been carefully graded and coordinated with the text materials. Cost practice sets are included also. There are many helpful diagrams and charts.

The style is scholarly and should appeal particularly to the mature student. This would make a good reference book for the cost accountant executive.

> EMANUEL GRODY, East Los Angeles Junior College, Los Angeles, California.



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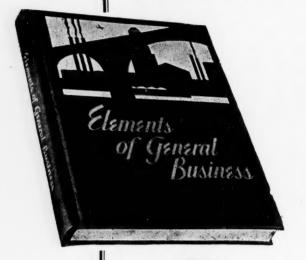
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#### Bookkeeping

(Continued from page 16)

If an instructor is fortunate enough to have an office under the present crowded conditions he may find it possible to spend two hours per day in this office. However, only a small percentage of the students can be accommodated by means of personal help during a two hour period and, of course, many of the students will have other classes scheduled during the instructor's office hours.

How then is the instructor to determine the students' difficulties and give helpful suggestions and advice?

There are various methods of detecting and remedying a student's difficulties in spite of the conditions that now exist. For example, the instructor may prepare a seating chart for the large classes. A notation can be made on the seating chart for all students who are scoring very low on achievement tests or whose home work appears to have been copied or incorrectly done. The instructor can then direct pertinent questions to these students during the class period. In this way, some of the difficulties may be discovered. The instructor should also look up the results of the placement tests which determine the reading comprehension of a student. If it is discovered the student is a slow reader, or cannot comprehend what he has read, it may be wise to have that student take special work in a reading clinic.

Many students find it difficult to review in preparation for an accounting examination. They should be encouraged to underline sentences containing important information, or to make notations in the margins of the textbook. After all, the textbook is meant to be used, and not something to be retained in its original state of beauty, only to be filed away for posterity upon the completion of the course. When the student wants to review for an examination, he can study the material he has underlined in his text, the notations in the margins, as well as any other class notes that he may have.

The use of visual aids is especially important in large classes, since a good picture tells a better story than many words. There is a great need for more visual aids and the field is wide open for the development of sound and silent films, strip films and slides.

Accounting laboratories should be set up to render aid to the accounting student who encounters difficulty in his work. These labs should be regularly scheduled each day with a qualified instructor present at all times. Advanced accounting students could be placed in charge of these laboratories if instructors from the accounting department are not available. All students should be encouraged to go to these special rooms with special emphasis being placed on the poorer students' attendance.

Short problems should be utilized for classroom work. Such problems are easily duplicated and can be distributed as needed during the period. Thus the work of each individual student may then be observed and evaluated which in turn may lead to further remedial work.

## UBEA IN ACTION

#### HEADQUARTER'S NOTES-

#### Know Your State Directors

It is at the state level that much of the frontline action for better business education is required. UBEA State Committees need the allegiance and active participation of every member to carry out effectively the objectives of the Association. If you can devote time, energy, and talents to planning and working with UBEA activities in your own community, please communicate with your state director, Council member, or executive secretary.

The names of state directors and Council members who are serving as state directors are listed below:

Alabama—Miss Lelah Brownfield, Alabama College for Women, Montevallo.

Arizona — Mrs. Lena M. Pollard, Chandler High School, Chandler.

Arkansas — Mrs. J. E. Johnson, Senior High School, Little Rock.

California — Mr. Edwin Swanson, San Jose State College, San Jose.

Colorado — Mrs. Catherine Sayer, High School, Leadville.

Connecticut — Dr. George S. Murray, Central High School, New Haven.

Delaware—Dr. C. A. Nolan, School

Admin. Bldg., Wilmington.

District of Columbia—Mrs. Gladys
P. Palmer, Langley Jr. High School,
Washington.

Florida—Miss Frances M. McQuarrie, Deland High School, Deland.

Georgia — Mr. Lloyd E. Baugham, Roosevelt High School, Atlanta.

Idaho — Mrs. Marcia Witter, High School, Boise.

Illinois — Mr. Bertrand D. Holley, Western State Teachers College, Charleston.

Indiana — Miss Katherine Brown, Anderson High School, Anderson.

Iowa—Miss Ruth Griffith, Mckinley
High School, Cedar Rapids.

Kansas — Miss Mary Irene Brock, Wyandotte High School, Kansas City.

Kentucky — Mr. Celic Prezioso, Holmes High School, Covington.

#### Knoxville Scene of SBEA Convention

Lloyd E. Baugham, President, Southern Business Education Association, Roosevelt High School, Atlanta, Georgia.



The Southern Business Education Association, an affiliate of UBEA, held its twenty-fifth annual convention at the Andrew Johnson Hotel, Knoxville, Tennessee on November 27-29, 1947. The theme of the convention was "Business Education Looks Ahead."

Lelah Brownfield, Alabama College for Women, Montevallo, presided over the Fellowship Dinner which opened the convention on Thursday evening. The first general session was held Friday morning with C. C. Steed, Elizabethton School of Business, Elizabethton, Tennessee, the presiding officer. Timely addresses were given at this session by Theodore Woodward, George Peabody College

Louisiana—Mr. Wilbur Lee Perkins, Northéast Junior College, Monroe.

Maine — Mr. William S. Brawn, High School, Norway.

Maryland—Mr. Thomas M. Green, Baltimore County Schools, Baltimore. Massachusetts — Mr. Bruce F. Jef-

fery, State Teachers College, Salem.

Minnesota—Miss Audra Whitford,
State Teachers College, St. Cloud.

Mississippi — Dr. Armon J. Lawrence, University of Mississippi, University.

Missouri — Dr. Lucas Sterne, Central Missouri State College, Warrensburg.

Montana — Mrs. Brenda Wilson, Montana State University, Missoula. Nebraska — Miss Helen Eighmy, University of Nebraska, Lincoln.

Nevada—Miss Mildred Klaus, High School, Reno.

New Hampshire — Mr. Robert J. Ernst, Plymouth Teachers College, Plymouth.

New Jersey — Mr. Bert Card, Orange High School, Orange.

New Mexico—Mr. Floyd W. Kelly, Highlands University, Las Vegas.

New York—Dr. Edward L. Cooper, State College for Teachers, Albany.

North Carolina—Miss Anne Barksdale, Wilmington College, Wilmington

Ohio—Miss Gladys Bahr, Withrow High School, Cincinnati.

Oklahoma — Mr. Robert A. Lowry, Oklahoma A & M College, Stillwater.

Oregon—Miss Clara Voyen, Albany High School, Albany.

Rhode Island — Mr. E. C. Wilbur, Bryant College, Providence.

South Carolina — Mrs. Rita Polk Heape, Greenville High School, Greenville.

South Dakota—Miss Hulda Vaaler, University of South Dakota, Vermillion.

Tennessee—Mr. G. H. Parker, University of Tennessee, Knoxville.

Texas — Dr. Eugene H. Hughes, University of Houston, Houston.

Utah — Miss Nellie Ray, Snow College, Ehpraim.

Vermont — Miss Catherine Nulty, University of Vermont, Burlington.

Washington — Miss Emma Glebe, State College, Pullman.

West Virginia — Miss Madalene Smith, West Virginia University, Morgantown.

Wisconsin — Mr. Clemens Wisch, Milwaukee Vocational School, Milwaukee.

Wyoming—Mr. F. J. Williams, University of Wyoming, Laramie.

Canada—Dr. Lloyd White, Central High School of Commerce, Toronto.

Hawaii — Mrs. Jeanette W. Tilley, University of Hawaii, Honolulu,

Puerto Rico — Mrs. Antonia F. Barkell, Insular Board, San Juan.

for Teachers, Nashville, Tennessee; Paul A. Carlson, State Teachers College, Whitewater, Wisconsin; and J. Frank Dame, Educational Director of Noma, Philadelphia, Pennsylvania.

The nine sectional meetings which were held Friday afternoon and Saturday morning featured the following prominent business educators: B. Frank Kyker, U. S. Office of Education, Washington, D. C.; Arthur L. Walker, State Department of Public Instruction, Richmond, Virginia: Pattie L. Sinclair, Joe Brown High School, Atlanta, Georgia; Harvey G. Meyers, University of Tennessee, Knoxville, Tennessee; G. Henry Richert, U. S. Office of Education, Washington, D. C.; D. A. Albright, State Department of Education, Nashville, Tennessee; R. Norvel Garrett, Southeastern Louisiana College, Hammond, Louisiana; John Rowe, Boston University, Boston, Massachusetts: Herbert Tonne, New York University, New York City; Vance T. Littlejohn, The Woman's College of the University of North Carolina, Greensboro: Mae Walker, Lincoln Memorial University, Harrogate, Tennessee; A. M. Luther, Knoxville Business College, Knoxville, Tennessee: H. A. Brandon, South-Western Publishing Company, Cincinnati, Ohio; M. O. Kirkpatrick, King's Business College, Charlotte, North Carolina: Mildred L. Bingham, Mars Hill College, Mars Hill, North Carolina; and Harry M. Bowser, The Gregg Publishing Company, New York City.

Presiding over the sectional meetings were: Elise Davis, University of Tennessee, Knoxville, Tennessee —

College and University Section; B. W. Jenkins, Campbell College, Buie's Creek, North Carolina-Junior College Section; Elise Etheredge, Columbia High School, Columbia, South Carolina-Secondary School Section: B. M. Canup, Elizabethton School of Business, Elizabethton, Tennessee-Private Business Schools Section; Donald Fuller, Georgia State College for Women, Milledgeville, Georgia-Secretarial Subjects Section; Aimee Poncet, Orleans Parish School Board, New Orleans, Louisiana—Distributive Occupations Section: Edward I. Crawford, Memphis State College. Memphis, Tennessee — Bookkeeping and Accounting Section; and Clyde W. Humphrey, U. S. Office of Education, Washington, D. C. - Business Education Services Section.

Officers of the Southern Business Education Association are: president -Lloyd E. Baugham, Roosevelt High School, Atlanta, Georgia; first vicepresident-Lelah Brownfield, Alabama College for Women, Montevallo, Alabama; second vice-president - C. C. Steed, Elizabethton School of Business, Elizabethton, Tennessee; secretary — Elise Etheredge, Columbia High School, Columbia, South Carolina; and treasurer—Howard M. Norton, Louisiana State University, Baton Rouge, Louisiana. Other members of the SBEA Executive Board are: Margaret Buchanan, Mississippi State College for Women, Columbus, Mississippi; Mary E. Vance, Mercer University, Macon, Georgia; Bernice D. Bjonured, New Hanover High School, Wilmington, North Carolina; John H.

(Continued on page 50)

#### **UBEA** Affiliates

- Akron Business Education Associa-
- Arizona Business Educators' Association
- Arkansas Education Association, Business Section
- California Business Education Association
- Chicago Area Business Educators'
  Association
- Colorado Education Association, Commercial Section
- Connecticut Business Education Association
- Delaware Commercial Teachers Association
- Plorida Education Association, Business Education Section
- Houston Independent School System, Commercial Teachers Association
- Commercial Teachers Association

  Iowa Business Education Association
- Kansas State Teachers Association, Business Education Section
- Louisiana Business Teachers Association
- Nebraska State Education Association. District 1, Business Education Section
- New Jersey Business Education Association
- North Carolina Education Association, Business Education Section
- North Dakota Education Association, Commercial Education Section
- Ohio Business Education Association
- Oklahoma Education Association, Commercial Education Section
- Oregon Business Education Association
- Southern Business Education Association
- Texas State Teachers Association, Business Education Section
- West Virginia Education Association, Business Education Section
- Wisconsin Education Association, Commercial Section

#### ISSUE EDITORS

October (1947) Shorthand, Thelma M. Potter, Teachers College, Columbia University, New York 27, N. Y.

November (1947) Typewriting, John L. Rowe, Boston University, Boston, Massachusetts.

December (1947) Bookkeeping & Accounting, Milton C. Olson, Ball State Teachers College, Muncie, Indiana.

January (1948) Office Machines, James R. Meehan, Hunter College, 695 Park Ave., New York, N. Y. February (1948) General Clerical, Helen B. Borland, University of Colorado, Boulder, Colorado. March (1948) Basic Business, Harold B. Gilbreth, Win-

March (1948) Basic Business, Harold B. Gilbreth, Winthrop College, Rock Hill, S. Carolina. April (1948) Distributive Occupations, William R. Black-

April (1948) Distributive Occupations, William R. Blackler, Bureau of Business Education, Sacramento 14, California.

May (1948) Office Standards and Cooperation with Business, Harm Harms, Capital University, Columbus 9, Ohio.

#### Membership Briefs



F. W. Kelly, UBEA State Membership Chairman, New Mexico Highlands University, Las Vegas, New Mexico.

- New Mexico has the distinction of being the first state to enroll one out of five business teachers in UBEA. New Mexico has also made much progress in establishing state committees for the purpose of cooperating in the major activities sponsored by UBEA. Chairmen of these committees are: Eva M. Israel, Administrators' W. J. Lincoln, Tests and Standards; Virginia Reva, FBLA; Vernon V. Payne, Research; and Floyd W. Kelly, Membership. Congratulations, New Mexico!
- Oregon is the second state to meet the goal in the membership recruitment program and holds an enviable record for percentage of business teachers enrolled in their national professional organization. Clara Voyen, Albany High School, is State Membership Chairman.
- New Jersey registered the largest increase in memberships of any state during the month of November. A number of New Jersey High School Business Departments boast of 100% enrollment in UBEA. Bert Card, Orange High School, Orange, is New Jersey's Membership Chairman.
- Central District is leading all districts in total number of members. Pacific District has the highest percentage of business teachers enrolled in UBEA.

## Preview of the Winter, 1948 National Business Education Quarterly

By J. MARSHALL HANNA, Administrators' Editor

"To many participants the average conference is a nightmare of utter confusion in which experts, resource persons, chairmen and discussion leaders discuss in extreme academic detail the problems of the little people who pay the dues and make the conference possible. In this sideshow of vocal gymnastics the dues-paying recipient is seldom granted much opportunity to participate. When the meeting adjourns, the resourceful persons and leaders, with their few academic hero-worshippers, congratulate themselves on the success of the conference. The others slip out as unobtrusively as possible for an exhilarating bull session or a game of penny-ante. Here they can talk in a language everyone can understand. Here, too, are others compatible enough to listen and experienced enough to suggest solutions to the problems that may be presented."

Thus, an article in the forthcoming winter issue of the Quarterly fires a broadside at one of our major problems—what to do with our teacher conventions. Readers of this issue will find that a number of our administrative practices take similar verbal punching.

Business education administrators will not wish to miss the winter issue of the *Quarterly* for it is the first of the new administrative issues, written by business education administrators about administrative problems. It will earry articles written by three state directors of business education, Mr. Arthur L. Walker, Dr. Carol Nolan, and Mr. Wade Bash. These directors discuss cooperative education, state standards, and a state plan for business education.

Dr. M. Herbert Freeman and Louis Nanassy have collaborated on an article appearing in the January issue dealing with the administrative problems of the department head of teacher-training institutions. The editor predicts that this article will soon appear on many graduate course reading lists. It is one of the most thorough treatments of department head responsibilities and duties that has been published.

Some of our best programs in business education are to be found in the small one-business-teacher high schools. There are certain characteristies of good education which are inherent in the small school situation. Mr. Charles Wilson, a superintendent of schools, points out these advantages. Miss Frances French tells how one large school system experimented on a plan to capture some of the small school advantages for the large school situation. If you have been inclined to sell short business education in the small schools, it is suggested that you read these two articles.

Dr. Marion Lamb comes to the aid of the new teacher by pointing out what administrators can do to help the beginning teachers on the job. Many a potentially excellent teacher has been lost to the profession because of poor administrative practices. Dr. Lamb's interestingly written article is one no administrator should miss reading.

If you are interested in equipment—and show me a business educator who isn't—you will include Mr. Gilbert Kahn's article in the January issue on your must reading list. Mr. Kahn took the responsibility for making a survey of twenty-eight office machine equipment manufacturers and he reports his findings in the

Is it possible that we business educators could have become about as careless and indifferent with our employer contacts as the present day automobile salesmen? Mr. Ernest Gaunt thinks there is considerable evidence that we need to mend our business education fences and get ready for the employer labor market. He makes some very timely suggestions.

There are ten good reasons why you wil not want to miss reading the January issue of the *Quarterly*. All ten of them are *articles*.

#### THINK . . . PLAN . . . ACT . .

- It is the primary responsibility of the organized profession to make education increasingly effective.
- The public tends to value the teaching profession by the standards which it sets for itself and its members.
- Until the great majority of teachers actively participate in well-integrated local, state, and national associations, the profession will remain a house divided.
- Recent membership gains have often been greatest in the states where average salaries are extremely low.
- Let us attach importance not only to what we get but to what we give.
- Leadership must awaken anew with each generation.

#### Research Awards

#### Gold Key for Outstanding Projects

The United Business Education Association will make research awards each year in the form of a gold key. These awards will be made to teachers and students who contribute to the furthering of knowledge or practices in business education. The key will be a mark of distinction and a token of advanced thinking and practice on the part of the wearer.

The award will be made not only to those persons who pursue advanced study and do an outstanding research project but also to those everyday, down-to-earth classroom teachers who are finding and using better ways of doing ordinary things. A committee on award of the United Business Education Research Foundation will review the projects and recommend to the National Council for Business Education that a key be presented to those persons whose projects meet the specifications. The personnel of the Awards Committee will be named at the first annual meeting of the Research Foundation.

#### Your NBE Test Program

Since the wartime recess taken by the National Business Entrance Tests, programs have been conducted in 1945, 1946, and 1947. In 1947, 116 schools in 20 of these United States, and in the Province of Ontario participated.

The NBET program is rolling. More and more school administrators as well as more and more office executives are realizing the worth of standardized testing on the "ready for work" level. The UBEA and Noma last December decided to put more effort definitely into promoting the test program and orders for the tests are being filled through the National Office Management Association, located at 12 East Chelten Avenue, Philadelphia 44, Pennsylvania, Dr. J. Frank Dame, who is the educational staff man of Noma has charge of promotion work on the NBET and he is familiar with the problems of business employment, school administration and with the test program.

#### Stability of the Program

The NBET is a service rendered to schools at cost or less than cost. There is no other test program that gives so much in material and scoring for such little financial outlay when the two following features are considered. The skill tests are manually corrected and new forms are prepared each year. All deficits incurred by the program are met jointly and equally by the joint sponsors, namely, UBEA and NOMA.

Labor and money could be saved by preparing only two, perhaps three forms, and using these forms on some kind of alternating basis. However, NBET prepares new forms each year because reasonable and practicable suggestions and criticisms can be recognized in the preparation of yearly tests and old tests can be distributed for practice use.

The Joint Committee has had the pleasant experience of receiving letters from industrial users of the tests who report that they find a high degree of reliability in this or that test. Such conclusions are based upon a study of the subsequent performance of persons who take the tests

The Joint Committee members sometimes wonder if either teachers or office managers realize the tremendous amount of work involved in producing new forms each year. Authors for the five skill, the fundamentals and general information tests must be chosen and become acquainted with past practices in making the tests as well as the pitfalls that are likely to cause difficulty. They must also take cognizance of recent suggestions. The copy must be edited. The copy must be submitted to several persons for purposes of review. Directions must be prepared for the testee, and usable copy prepared by the printer. Printer's proof must be read, printing instructions given, and quantities estimated.

#### Capitalizing a Handicap

We have said that the skill tests must be corrected manually. Such labor has real benefit in that an intelligent corrector can determine why the participants in a particular school did poorly or well, and the information may be confidentially conveyed to that school. The corrector can also make general observations based upon the experience of reading or checking many papers. The general observations on the 1947 forms are reproduced in the following paragraphs together with interesting statistics.

#### Comments on the Tests

Stenography. This is the one test in which grades were bunched in the lower brackets. The top score possible (without bonus) was 180 while the top score earned was 205. There was one 195, then from 180 down to 130 there were from one to five scores at each five point level. The median was 52 which was less than an acceptable certification (66) grade. 50% of the scores were between 30 and 75.

In order to earn the certification grade of 66, a person needed to do

only the first five letters, and then could suffer penalties for ten errors. It would seem that to transcribe 770 words in 90 minutes, with only ten errors is a fair requirement to impose upon anyone who aspires to enter stenographic employment.

The first seven items make up about 1,018 words, and three one-minute periods were allowed for redictation. Even if a whole item, say number 5, was disqualified, there were still 94 points available for the other six, and fourteen errors in these six letters would not have brought the score below the certification point.

Now, to be more constructive. It appears that most of the testees were not accustomed either to the long take even at a low speed, or even to the long transcription period. It seems further than the entrants were overcome in the taking, rather than in the amount of transcription. Evidently they could transcribe if they could read their notes but two bars were set up in the long period of dictation. Fatigue caused confused note taking after the first ten minutes as well as poor outlines and incorrectly written words.

After 30 minutes of take the first notes were cold. The length of the stenography tests was based on office practice and a 30 minute take does not seem to be an unfair requirement.

It should be suggested that schools make the effort to give practice in long taking, and sustained periods of transcribing. If the transcribing period cannot be made long enough for 30 minute dictation, we suggest the following: Dictate 30 or more minutes during the shorthand period. Collect the notebooks. In the next typing period give out the notebooks and announce:

"Transcribe #2, #7, #11, then any others you can, working back from the last one."

Through the above plan the student is required to transcribe from the first, middle, and last part of the dictation. Very likely the later items dictated will be poorly transcribed. If so, subsequent assignments might

be something like "Start with #7, and transcribe to the end."

Typewriting. This test was well done. The minimum acceptable score was 90, but the median was 138. The possible score without bonus was 120, and no bonus was given unless all items were acceptable. The highest score earned was 205, 50% of the scores fell between 115 and 160. To have all items acceptable a person must needs follow the directions carefully. The production tests composed by Professor Frederick G. Nichols of Harvard University and distributed by the Typewriter Research Bureau accelerated the practice in typing classes in terms of doing less speed work and doing more production work. The effort shows up favorably in the NBET Tests.

Bookkeeping. These scores were well scattered all the way from 0 to 195, with one at 252. Without bonus, the top possible was 195, 50% of the grades fell between 50 and 125, the widest range of the three most taken tests. The scores were well scattered.

It was apparent that one bit of misjudgment caused many people to score much less than they should. It was responsible for a number of failures and that judgment error was the hurry to get a trial balance. The test required that errors be corrected and a trial balance to be taken. testees discovered a few errors and then attacked the trial balance. A few even tried for the trial balance without correcting any errors. A person can take a trial balance without being a real bookkeeper. It is doubtful that he can be dignified by the term bookkeeper if he cannot find and correct errors and the test is an effort to find out if a person qualifies as a bookkeeper.

Machine Calculation. The top score possible before adding any bonus is 155. The highest earned was 191, and the score of 185 was at the 99 per centile. The median was 110 and minimum acceptable was 90. Like filing and bookkeeping this test showed no bunching of scores near the median, but the scores stretched fair-

ly evenly all the way, so that the middle 50% of the scores ranged from 80 to 140.

Filing. Unlike stenography or typing the scores in filing did not bunch around the median. They showed a fairly steady distribution from 30 to 199. The range of the middle 50% was 60 to 140. The median was 100, and the minimum acceptable was 90. The possible score before bonus was 211, and the highest made was 199, thus this is the only one of the skill tests in which no one earned as much as the top possible pre-bonus score. This is not to say that many did any test perfectly. Top pre-bonus scores are rare, but in a number of cases the bonus exceeds the amount of penalties for the very few errors.

The Joint Committee earnestly recommends that schools do more with filing, machine calculation, and bookkeeping. Certainly workers with these skills are as much sought after as stenographers.

Let's have a look at some statistics:

Percentage of persons taking each test

Stenography	39.5
Typing	26.5
Bookkeeping	17
Machine Calculation	10
Filing	7

Isn't filing more than one sixth as important as shorthand? Isn't machine calculation more than one fourth as important as note taking?

Bookkeeping, it would seem should have a better representation in the testing program and typing definitely should. For every stenographer there is certainly more than one production typist; also, many stenographers are required to do production typing as well as transcription.

Schools are registering a greater proportion of their stenography pupils in the test program than are entered in any of the other skill tests. We should like to see the other skills have higher representation in the test program, but surely these other skills

(Continued on page 48)



# Now! Keyboard Margin Control\* sets margins at the flick of a finger



A BOON TO TYPISTS, Keyboard Margin Control—exclusive on The Remington KMC\* Typewriter—takes the merest flick of a finger, gives on the dot margin accuracy without moving the fingers from the keyboard. Like the other features on the Remington KMC Typewriter, it is designed to ease and speed the typists' work. These features mean extra savings for executives and owners, too. Keyboard Margin Control and the other Plus Values built into this magnifi-

cent typewriter—all available without extra charge—provide distinctive, clear-cut, efficient typing at the lowest net cost. Let a near-by Remington Rand representative show you how the replacement of your outdated machines with Remington KMC Typewriters can lower your typing costs.





## Voices to Transcribe

All problems one faces in teaching a shorthand transcription class are present in teaching machine transcription.

By THELMA M. POTTER Teachers College, Columbia University New York City

Voices direct the action of modern offices. Sometimes they are the voices of people speaking. Sometimes they are recorded voices giving directions through machines. For example, a man in Connecticut puts a green disk into an envelope and mails it to New York. A man in New York receives it, places it on a machine, and listens to a voice giving him a recommendation for the organization of a training program in his office.

In a downtown New York insurance company, a number of men lean back in swivel chairs, move forward occasionally to consult papers on their desks and concentratedly dictate to their individual machines. In one corner of the large office behind a glass enclosure, several girls sitting at typewriters listen to those voices recorded on wax cylinders and transcribe the information on complex insurance forms.

A research worker studying the speech of radio announcers buys a spool of wire, and a machine records voices on it. The worker plays the voices back, analyzes the speech characteristics, and with the material writes a training manual in speech for announcers.

A stenographic worker at a large medical center takes several case histories in shorthand for one doctor and transcribes them for the files. The same worker also types a letter from oral dictation for one of the nurses in the clinic.

These illustrations present the recording and transcribing methods common to the modern office large or small. The typewriter and the shorthand symbol are old and familiar recording and transcribing instruments to all of us; but the plastic disk, the wax cylinder, and the magnetic wire are a little less familiar. They are, without question, time and labor savers. A dictation machine requires only the presence of the person dictating. Dictation can be done whenever desired, simply by starting the recording device and talking to the machine. While the dictation is being given to the machine, the stenographer is released for other tasks. This major timesaving element along with a number of other such advan-

tages assures us that the voice recorder is here to stay. As teachers of potential office workers, we need to become familiar with such machines and the teaching problems they present.

#### Types of Voice Recorders and Transcribers

As indicated, there are three general types of voice recorders and transcribers—one in which the voice is recorded on wax cylinders (Dictaphone or Ediphone, for example); one in which the voice is recorded on plastic disks (Soundscriber, Audograph, or Mail-A-Voice, for example); one in which the voice is recorded on wire (RCA Wire Recorder or Sound-on Wire, for example).

Each type of machine has its own peculiarities and fits into some types of office situations very well, into others not so satisfactorily. The kind of work for which a machine is needed, the situations under which the work is to be done, the personal preferences of those concerned, and the cost will determine for business the kind of machine to be purchased. For example, if all the material recorded is to be transcribed, then a machine should be chosen which will permit the easiest transcription. If the transcription is to be done on a typewriter by a typist of average ability in a room with other people, then it would be necessary to choose a machine which produces the voice through earphones and with a stop-start control on the speed with which the recording is played back.

What recording and transcribing equipment should the school buy? The type of recording-transcribing machine which the school should buy for training purposes depends, naturally, on the equipment in prevalent use in the community which the school serves. Planned interviews or telephone calls by the students or teachers, or a questionnaire will supply this information easily and quickly. Interviews or telephone calls are a more desirable means of obtaining the information because they are a direct, personal contact. The personal contact is a valuable experience for the student and teacher and a

good public relations element for the school. Being able to talk directly with those concerned with the machines is much more satisfactory than trying to interpret the meanings of answers on a questionnaire.

If, however, a decision concerning equipment has to be made without any guiding information, then it is wise to purchase one of each type of machine so far as funds will permit. This will enable students to become familiar with the different types of equipment they might meet in an office. The wax cylinder and plastic disk machines are probably the most widely used; the wire recorder in its present stage of development is less suitable for the common routine of an office.

If you purchase a wax cylinder machine, there are three units which are available to you—the dictating machine, the transcribing machine, and the shaving machine. (The shaving machine literally shaves the voice from a cylinder, so that the cylinder may be used again. If you are a skillful shaver, you will be able to shave them about a hundred times and thus get a hundred recordings.) It is desirable to have all three of these units in a school if a budget permits. It is the complete machine unit as it will be found in the office, and to give complete training to potential stenographic workers, it is desirable that they at least become familiar with all three units.

A plastic disk machine may offer two units—the dictating machine and the transcribing machine. On the plastic disk machine it is also possible to transcribe from the dictating machine. Transcription directly from the dictating machine, however, limits the use of the machine. The employer cannot dictate when the stenographer is using the machine for transcription. This defeats the real advantage of machine transcription.

Plastic disks cost only a few cents apiece and therefore are not often used again. This eliminates the need of an additional machine to remove the previous dictating from the disk. However, it must be noted that if desired, voices may be erased from the disks.

The wire recorder offers one unit, the dictating unit, which also has a play back feature.

If funds are low for the purchase of equipment or lack of student and community demands make it undesirable to invest much money in this type of equipment, then the following recommendations might be of value:

- If only one machine can be bought buy a transcribing machine. Remember that wax records have to be shaved to be used again, so be sure a shaving machine is available for your use if you buy a wax record machine.
- If you already have a dictating machine, a shaving machine, and a transcribing machine, more transcribing machines should be purchased subsequently inasmuch as it is on these machines that most of the stenographer's skill is to be developed.

- When purchasing machines, check on the availability of service. Lack of it can be a distressing problem, and being able to get a machine repaired is an important factor in the constant utility of a machine.
- 4. Teaching aids and materials are also an element in a machine purchase. Up to this point, the wax eylinder machines offer the most complete teaching materials and aids. The other type of recorders and transcribers are relatively new in the field and have not yet produced an equivalent amount of teaching materials and aids.

#### What Should Be Taught?

There are two broad areas of learning required on the recording and transcribing machines:

- 1. The operation of the machines themselves.
- 2. The skills used in connection with each of the ma-

Of these two areas, the first is the easier to accomplish and of lesser importance. It takes literally only a few minutes for students to learn how to operate any of the recording or transcribing machines, but the occupational use of the machines depends on the productive skills which must be developed in connection with the machine. For example, you can learn in a minute or two how to put a disk on a machine and turn on the recording device. But this is of no avail unless you have something to say and know how to say it so that the machine can record it.

In order to get a clear picture of what should be included in a training program on the voicescription machines, a summary of skills which are required for successful occupational use is essential.

#### Shaving Machine

- 1. Check machine for operation
- 2. Place cylinder on the machine
- 3. Adjust shaving knife
- 4. Turn on machine
- Remove and dispose of cylinder as prescribed by the office

The Dictating Machine. (This is the employer's machine primarily, but with modern office methods, it is not unusual to find this machine in use by many different types of workers who may, for example, record memoranda to be transcribed within a stenographic pool for the consumption of their superior officers or people in other departments.)

- 1. Machine skill
  - (a) plugging in the machine
  - (b) checking it for operation

- (c) inserting the cylinder, disk, or wire
- (d) adjusting the recording mechanism
- (e) turning on the recording mechanism
- (f) dictating
  - (1) speech
  - (2) oral composition
- (g) indication of errors in dictation
- (h) removal and dispatch of cylinder or disk to transcriber. (The wire recorder plays back on the same machine.)

Of these items dictation (f) is the most important and requires the most training. Good speech and oral composition cannot be secured in a few minutes' instruction. They require good teaching and patient practice. Classroom exercises can be designed to teach students to talk

naturally, freely, and easily (not dictate in the sense of timed dictation as found too frequently in the stenographic classroom). Letters may be given to them to answer on the dictating machine so that they may learn how to plan what they are going to say, how they are going to say it, and then to say it with as few changes as possible. Errors and changes on the voice recorder are as annoying and difficult as errors and changes in shorthand notes.

In many large offices, the advent of the dictating machine has caused pamphlets and brochures, and, in some instances, training programs to be developed to teach dictators how to dictate effectively. Eventually, if the schools do their job well, this in-service training should become unnecessary.

(Continued on page 44)

# Clerical Training Values of Calculating and Adding - Listing Machines

No longer can business education confine its curriculum to shorthand, typewriting and bookkeeping

By R. D. BRYAN

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Business education in recent years has added to its accepted curriculum the teaching of office machines. It has also been a comparatively short period of time since the subject of Office Machine instruction was made a part of the program of annual conventions of business teachers. Although many school systems have been teaching office machines for several years, hundreds of other schools are now planning such instruction for the first time. This article is designed to be of constructive value to both types of schools.

Office machine training covers such a wide diversity in types of machine that it is important for any discussion of the subject to be separated into major groups of equipment. This article will, therefore, be limited entirely to calculating and adding-listing machines. Any conclusions or ideas drawn from this article, therefore, may or may not apply to other types of machine equipment; such as, duplicating machines, transcribing machines and bookkeeping and billing machines which will be described by more competent authorities who are most familiar with those fields of instruction.

Business teachers and administrators who approach

this training program for the first time are liable to confuse calculating machines with adding-listing machines and vice versa. It is true that all calculating machines will add and subtract and that adding-listing machines can be operated to multiply and divide by an addition process, only because arithmetic is based upon the process of addition and subtraction.

There is, however, a great difference in these two types of equipment which difference is best evidenced by the fact that business offices use both types for specific purposes. Therefore, instruction in the use of calculating machines is in one category, whereas the teaching as applied to adding-listing machines is in quite another. Several manufacturers of office equipment make both calculating machines and adding-listing machines.

In the calculating machine field, there are two general types—the crank type calculating machine where the results of multiplication and divisions are secured through the rotation of a handle or crank or through the repeated revolutions of a motor. The other type of calculating machine in accepted business use is the keydrive type where results in multiplication or division

are secured through the repeated depression of keys.

Both of these two types of calculating machine are equipped with full keyboards and are non-listing, recording their results in sets of dials rather than listing them on paper. Since both types of calculating machines are in accepted use by business offices, both types can be taught in the business education program.

Adding-listing machines, as the name implies, are primarily used in business for addition and subtraction; whereas, calculating machines are used primarily for multiplication and division, and for addition and subtraction incidental to multiplication and division. In performing addition and subtraction, the adding-listing machine records all amount on a tape, or list, as well as the totals of such amounts.

In this field, there are two basic types in use in business—the full keyboard type and the ten-key type. Therefore, a business education program can justify instruction in both types. The full keyboard type has columns of keys from 1 to 9 in various capacities where the amounts to be added are set. The ten-key type has only ten keys in several rows where the amounts are set by repeated strokes of the keys. The keys range from 0 to 9 inclusive. Instruction can be justified in schools on both types of adding-listing machines.

#### Business Use of Equipment

When business offices generally use any type of office machine, there is established a proper justification for instruction in that type of equipment in schools. This applies definitely to calculating machines (crank type and key drive), and adding-listing machines (full keyboard and ten key).

Calculating machines are generally used in business and government offices for all types of figurework, where multiplication and division fundamental operations are principally required. A few simple examples for the use of these machines are invoices, inventories, payrolls, statistics, estimating, costs, analysis and distribution; and, in the technical field, engineering formulae, actuarial problems, statistical correlation, amortization of loans and bonds, etc.

Adding-listing machines are primarily used in business and government offices, in bookkeeping and accounting work where the totaling and listing of items to be added or subtracted is a necessity. These machines, because of the printed figures produced, also obviate the need of transferring figures to paper for totalization. They also furnish prelists for proof purposes. A few simple examples for the use of these machines is the listing of checks and deposits, balance listing, prelisting payroll deductions, totaling sales checks, old and new balance proof, weight computation, sales recapitulation, sales register proof, balancing bank accounts, aging past due accounts, inventory, etc.

#### Selection of Equipment

Since the business use of calculating and adding-listing machines justifies their adoption for instruction by schools, the same premise holds in the selection of the particular make of calculating machine or adding-listing machine. It is customary for schools to select the particular machine, in both types of calculating and adding-listing machine, which is in predominate use in the business offices of the employment area. The make of machine to be selected can be determined easily through a formal survey of business concerns, or through an informal questionnaire mailed to business offices in the area.

Exceptions to this general method of selection, of course, do occur — e.g., if the manufacturer's product to be selected is in general use but no teaching material is furnished with that product, it would be in better judgment for the school to select another similar product which did supply teaching material.

#### Plans of Instruction

Many articles have been written in business education publications relative to instruction plans for office machines, including calculating and adding-listing machines. It is, therefore, necessary in this article to describe briefly only the three recognized plans. The rotation plan is and will be the most widely used by all schools. In this plan, students are rotated weekly or biweekly from one type of machine to another. The teacher develops job sheets and a rotation schedule for the class. It is an economical plan to administer and develops an acquaintanceship with office machines prior to employment.

The battery plan is ideal for vocational schools or in large employment areas, where specialized training on several types of machine is required. It is too expensive for the average community since a roomful of one type of machine must be purchased for each type taught.

The integrated laboratory plan is ideal for combining machine training with clerical training in an office atmosphere. A model office is established in the classroom, with all of the essential jobs requiring machine operation. This plan is not widely used and never will be a general plan. It is difficult to administer.

#### Teaching Material

Textbooks are a vital part of academic education and all branches of instruction. They are also an essential part of office machine training in business education. The leading manufacturers of office machines offer printed courses of instruction which have been carefully planned in accordance with accepted teaching practices.

Publishers of business education textbooks have also

realized this need for office machine courses and now have available for schools well-planned courses in both types of calculating and adding-listing machine.

In addition to textbook materials, some manufacturers have developed various teachers' guides and visual aids to guide the teacher toward better instruction in this field.

The teaching material of the future is sure to be very different from the teaching material of the present. Instead of using problems outlined in textbooks, students will operate machines, using samples of media actually used in offices; such as, invoices, clock cards, inventory tickets and sheets, sales slips, etc. This should develop clerical job competence to a greater degree than the present type of teaching material.

The average school cannot develop a high degree of pupil-skill in calculating and adding-listing machine operation. A vocational school can — if the employment need warrants it — develop occupational skill. But it is equally important to have graduates in business education generally acquainted with leading types of calculating and adding-listing machines, so that upon employment they can begin to operate this equipment with a basic understanding of its use.

Crank-type calculating machines and full keyboard adding-listing machines are better adapted to clerical training, because they do not require a high degree of mechanical dexterity for their operation. Key-driven calculating machines and ten-key adding-listing ma-

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## The Teaching of Billing and Bookkeeping Machines

Is it worthwhile to train bookkeeping machine operators to become vocationally competent on one or even two models of machines?

By NORMAN WEISS Central Commercial High School New York, New York

A beginning class in bookkeeping machines usually enters the bookkeeping machine room with awe. The students conjure up the image of a machine that will solve any bookkeeping problem by merely pressing a button. This is probably true of the uninitiated adult as well. Actually, a bookkeeping machine is nothing more than a combination of a typewriting or printing device and an adding-subtracting machine which, in the hands of a trained operator, aids in the preparation of accounting records.

However, because of the great variety of work to be performed and lack of standardization in the field, there is a great diversity of makes and models of bookkeeping machines. To give some idea of this diversity, a short description of machines in use in one room at the Central Commercial High School follows:

National Cash Register No. 3000—Decimally arranged keyboard, two registers, back feed, date and description keys, no typewriter.

National Cash Register No. 3000—Four register and six register machines, date and description keys, decimally arranged keyboard, front feed, visible printing and standard typewriter.

Dalton—Ten-key keyboard, back feed with injector, two registers, date and description keys, no typewriter. Sundstrand—Ten-key keyboard, single register, front feed, no typewriter.

Underwood Standard—Typewriter, front feed, three registers, no description keys.

Burroughs 7800—Front feed, ten-key keyboard adding mechanism, and typewriter.

Burroughs 2300 — Bank posting machine, no type-writer, decimally arranged keyboard, date and description keys, two registers.

National Cash Register No. 2000 — No typewriter, twenty registers, date and description keys, prints four originals without carbons, cash register type machine

Burroughs 7200—Billing Machine, ten-key keyboard adding mechanism, ten-key multiplying mechanism, and typewriter.

This variety of models and makes of bookkeeping and billing machines presents a difficult obstacle to hurdle both from the point of discussing the machines and the teaching of them. If I were to speak of a room of typewriters or key-driven calculators, regardless of model or make, the general picture of the room would be the same.

#### "A bookkeeping machine is a combination of typewriting, printing and calculating devices."

However, mere mention in the case of a room filled with electrically-driven bookkeeping and billing machines would not give one a complete picture. It is necessary to specify the exact models and makes. The difference between the various machines is such that, for instance, a person familiar with the National Cash Register Model 2000 would be completely at a loss when placed at a National Cash Register model 3000. The remainder of this article, therefore, is written in as general terms as possible to take cognizance of this condition.

#### Types of Courses

Various types of courses may be offered depending upon the end result desired and the type of equipment available. Three different types of courses might be the following:

- A. Acquaintance Course where the student gains a knowledge of machine bookkeeping but little skill in the actual manipulation of the machine. This is usually part of an office machines course where the student is rotated from one machine to another, remaining only a short period of time at each type of machine. This is especially adaptable to a clerical, bookkeeping, or stenographic course in order to acquaint the student with the use of this type of machine in business. It is far better to have the student manipulate the machine, as his understanding of its function will be much clearer than if he were given a verbal explanation. The student should understand that the knowledge gained is extremely limited and does not at all qualify him as a bookkeeping machine operator.
- B. Bookkeeping Machines Minor—This course should be designed to give a student who is majoring in some other subject (Clerical, Bookkeeping, or Stenographic) an auxiliary skill. The length of the course should not exceed twenty-five hours. During that time, the student can be given a basic knowledge of the operation of the bookkeeping or billing machine and also acquire a minimum degree of skill in its manipulation.
- C. Bookkeeping Machines Major—would produce vocationally competent operators. The length of the course is 100 hours during which time the student studies more than one type of machine, depending upon his ability.

The following Course of Study is for the training of vocationally competent bookkeeping machine operators. Although the majority of schools do not have the variety of machines required for this course, the teacher can extract from this more extensive material those points considered pertinent to his own set-up. For an acquaintance with a machine, no skill building is required. Hence, intensive drill material, as such, should be eliminated.

#### Course of Study

Elementary Course-20 weeks

This course gives complete instruction in the posting of accounts receivable on a bookkeeping machine. The student learns the business procedures and handling of forms connected with the work; he learns the operation of only one type of bookkeeping machine.

Advanced Course-20 weeks

The student works on a different make machine from the one he used in the elementary course. The student studies account payable and stock record posting, and the use of the voucher system in machine bookkeeping. Skill in inserting and aligning ledger cards is stressed. Selected students work on multiple register bookkeeping machines.

#### Elementary-Units of Instruction

- Key functions—date keys, non-add, folio, total, subtotal, correction, repeat, minus bar, plus bar.
- Addition—touch method on ten-key machines and short cut method on full keyboard machines.
- 3. Symbols-how to check tape and file it.
- 4. Comparison of hand and machine bookkeeping.
- 5. Types of proof and how errors show up in proof.
- 6. Posting and proving debits.
- 7. Posting and proving credits.
- 8. How to handle a credit balance and an old credit balance.
- 9. Regular sets-prelist, post, and prove each day's work.
- 10. Final balance and statements.

#### Advanced-Units of Instruction

- Procedure in posting accounts payable and office procedure connected with it.
- 2. Posting credits to accounts payable.
- 3. Posting debits to accounts payable.
- 5. Remittance advice and writing check on machine.
- 5. Vouchers payable system.
- Department store project with the use of regular department store forms (accounts receivable).
- Posting from invoices and cash receipts journal—200 entries debits and 200 entries credits (accounts receivable).

#### Teaching Techniques

- I. It is preferable to teach the machines to a group of persons rather than to an individual student. Although up to this point only the differences among the various machines have been stressed, there are many points of similarity among the various makes and many topics applicable to all types of bookkeeping machines. The course should be arranged in such a manner that when these topics are reached, they can be taught in connection with all types of machines at one time. This allows the teacher more time for the development of the lesson and avoids needless repetition of the same material. Examples of such topics are:
  - 1. Forms used in machine bookkeeping.
  - 2. Comparison of machine and hand bookkeep-
  - 3. Advantages of machine bookkeeping.
  - 4. Methods of proof.
  - 5. Handling of ledger cards.
  - 6. Correction of errors.

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## **Duplicating Machines**

Duplicating equipment should be purchased only after careful study.

By BESS A. LEWIS West Side High School Newark, New Jersey

The business world of today demands efficiency, speed, and economy in producing duplicated copies.

The day for oral instructing and directing in business is gone. To get things done — orders filled; instructions carried out; information passed on to salesmen, employees, and customers; records kept; production of one kind or another followed up to completion, etc. — written copies must be put into the hands of those concerned in record time.

An analysis of copy requirements in thousands of offices in different lines of business reveals that the most common need is for duplication of from 2 to 150 copies to a job. Carbon copies are not always practical for these jobs. The copies are not always clear, and the rewriting of material by means of carbon is tedious, time consuming, and costly when more than 10 or 15 copies are involved. Here is where the duplicating machine has taken its place as the valuable office assistant in getting copies into circulation speedily and at a comparatively low cost.

#### Types of Duplicators and Those in Popular Use Today

There are many duplicating machines on the market today. Those in general use are the stencil duplicator, the fluid or direct process duplicator, the gelatin duplicator, the offset duplicator (the Multilith and the Rotaprint), the type duplicator (the Multigraph), and the auomatic typewriter (The Hooven). Surveys show that the most widely used and best known of these are the stencil duplicator, the fluid or direct process duplicator, and the gelatin duplicator, and this article will emphasize those just named.

The fluid and gelatin machines are used in hundreds of offices where they send out from 2 to 200 copies of sales letters, bulletins, price sheets, special reports, blank forms, statements, stock lists, trade letters, inventories, production reports, specifications, bids, bills of material, quotations, estimates, contracts, orders, menus, etc.; and where they do not object to the fact that the copies look like copies and that they are usually in purple ink. Work can be produced in various colors in one operation,

but not in black. These duplicators run copies on almost any size paper and on paper of varying thicknesses. Some models are hand controlled; others, both hand and electric controlled. The master copy, made with a special carbon, is good for a run of 200 and sometimes 300 copies; and at the end of a job run, if it is still good, it may be filed away for future use. The machines are inexpensive — the cost of producing 100 copies of an  $8\frac{1}{2}$  x 14 inch sheet is approximately 5 cents; they are easy to operate; and they produce about 40 to 60 copies a minute.

The stencil duplicator (the best known is the Mimeograph) is in extensive use and is another practical and inexpensive means of duplicating. By means of a master stencil sheet, the machine produces all types of printed and written material (including all materials mentioned in connection with the fluid and gelatin machines), as well as drawings and special insets, and turns out work which compares well with printed material. This machine is in great demand in offices where many copies are required. It is capable of runs of 5,000 or more copies from one stencil. Also, many business houses prefer the stencil process to the fluid or gelatin methods because typewritten stencil copies produce work in black ink which looks very much like original typewritten material. The stencil duplicator, too, is easy to operate; it takes various sizes and weights of paper and eards; it reproduces in many colors, it has a speed of about 150 copies a minute; and may be purchased with an automatic interleaver for blotting the copies. The stencils may be cleaned and filed for future use.

In addition to these widely used types of duplicators, there are the (1) offset duplicators which are used in cases where typewritten material, drawings, plans, charts, and photographs are to be reproduced in large quantities with a minimum of expense; (2) the Multigraph which is widely used for direct-mail advertising inasmuch as it produces copies which look very much like typewritten material; (3) the Cardograph which duplicates card-size messages; (4) the Dupligraph used for duplicating form letters, advertising material; in one

operation the Dupligraph prints a completed letter, fills in the name, the address, the salutation, and the date, and automatically affixes the signature in actual signature style; (5) the automatic typewriter (the Hooven) which types form letters, using a perforated roll similar to a player-piano music roll.

#### The Responsibility of the Schools in Teaching Duplication

Because of the widespread use of the duplicator today, every business department should have some duplicating equipment, and certainly business teachers should be alert to their responsibility in teaching (1) how to prepare the master copy or stencil; (2) how to obtain clear readable duplicated copies; (3) how to operate the most widely used machines; and (4) how to recognize the better grade duplicating supplies and materials by the results obtained.

Of course, duplicating equipment should be purchased only after careful study of the types of machines used in the community which the school serves. However, probably most community surveys would confirm the popularity of the stencil, fluid, and gelatin machines. Therefore the following paragraphs will emphasize this field of training responsibility.

While all phases of the duplicating process are important in the educational training program, the preparation of the master copy should always be given the most careful attention. This is due to several things—(1) because a careful check of office work will prove that more office workers are asked to prepare master copies and stencils than are required to operate duplicating machines and (2) because so much of the success of the duplicated product depends upon the planning of the master copy or stencil and the quality of this preparation.

#### Preparation of the Master or Stencil Copy

The Stencil: In teaching stencil duplication, each pupil in the class should have a blue and, if possible, a yellow stencil before him. The teacher should emphasize the following points: (1) the work of the stencil in reproducing; (2) the physical features of the stencil; (3) the importance of the markings on the stencil sheet; (4) the use of the cushion and backing sheet; (5) the advantage of the cellophane covering found on some stencils; (6) the importance of the layout — planning of the copy; (7) the typing speed and touch suggested for good stencil work; and (8) the method of making corrections on both blue and yellow stencils.

The Master Copy: In teaching fluid and gelatin type duplication, the following things should be emphasized: (1) the arrangement of the master copy forms as prepared by the duplicating machine company; (2) the importance of care in preparing the master car-

bon; (3) the care which should be given to planning the layout; (4) the preparation of the typewriter: (5) the method of making corrections.

If your department has both types of duplicating equipment—stencil and master-copy machines, each pupil should be assigned a practice job. This practice work should be carefully supervised by the teacher and suggestions should be given for improving the typing and corrections where necessary. After the practice period, each pupil should be assigned at least two stencil jobs and two master copy jobs. It is an excellent plan to have these practice stencils run on the duplicating machine or machines before the pupils start the good job assignments. In this way, they may see the results of their practice work and aim for improvement.

#### Machine Operation Instruction

If the duplicating equipment is available, every member of the class should be given machine instruction. It is an excellent plan to work with groups of three or four pupils. Each group may be assigned to machine operation practice for at least three days and possibly four, according to the class time allotment. After the first group is trained, these pupils can take over the job of teaching the next groups. Not only does this relieve the teacher when she has varied class activity, but it also develops leadership, responsibility, and cooperation. Pupils particularly interested in duplicating machine work should be chosen for the first group instruction.

The teaching procedure followed in the fundamental first-day instruction should include: (1) an explanation of the types of machines - hand or electrically controlled; (2) a careful description of the parts of the machine, the supplies and the gadgets important in operating the machine and working with it; (3) a demonstration by the teacher of the method of attaching the master copy or stencil, how to adjust the paper on the paper table, how to set the recorder, how to run the machine by hand and electrically, how to test the copy for proper placement and ink distribution (in case of a stencil), how to take off the master copy or stencil, how to clean the stencil, how to clean the machine, position it, and cover it, when the job or day's work is done. and how to file the master copy or stencil for future use; (4) a practice period wherein each student follows all the steps and instructions given in the demonstration and runs off 10 copies of a job by hand and electrically all under the teacher's supervision.

On the second, third, and fourth days, after the basic instructions have been given, the teacher should demonstrate and give practice on how to arrange the paper table for long and short paper, postal cards or envelopes, wide and narrow paper; how to ink and oil the stencil

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## Effective Dictating Machine Transcription

The dictator is one of the most important factors toward effective dictating machine transcription.

By LENORE FENTON MacCLAIN 3641 So. Utah Street Arlington, Virginia

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EDITOR'S NOTE: Mrs. MacClain is the holder of eleven awards in International contests and has set eight World records in typewriting and dictating machine transcription.

Effective Dictating Machine Transcription requires a composite of separate skills. First, good dictation; second, skillful transcription based on fluent typewriting and a knowledge of correct English usage. Without the former the latter is bound to be handicapped. Much has been written and said about the "hows and wherefores" of transcribing and the training of dietating machine transcriptionists. The dictator—the creator of the airwaves which the secretary is expected to transcribe rapidly and accurately-is often overlooked. He is one of the most important factors toward effective dictating machine transcription. If he is a "Mr. Mushmouth," or a "Mr. Unprepared," he cannot hope for efficient results. The dictator can improve dictation and produce better transcription results if he follows a few simple rules, such as the following:

- Give each letter or dictation unit advance study and brief the reply or dictation.
  - 2. Decide what is to be dictated.
  - 3. Decide how it is to be dictated.
- 4. As far as possible endeavor to dictate units, paragraphs or sequences of paragraphs without stopping. Frequent stops, silences and a dropping of the voice are confusing to the transcriptionist.
- 5. ALWAYS dictate directions, advice, and suggestions about a letter or dictation unit before the unit is dictated. It does not please your transcriptionist after she has typed a letter to hear, "Miss Jones, make two extra carbons of this letter for Mr. X and Mr. Y."
- 6. Use the Dictation Record Slip not only to indicate letter length, but also to record instructions you forgot to dictate before you started the letter.
  - 7. Be specific about corrections in the dictation.
- 8. Stop the dictation machine immediately when not dictating. Long silences are misleading about letter length, waste transcription time, and confuse the transcriptionist.

- 9. Maintain a reasonable voice level. Even a monotone, while dull, is better than a voice that drops to a peep and then blasts forth like a lion.
- 10. Enumerate clearly. If you have a tendency to slur word endings and short words, it is better to overcorrect on them.
- 11. Spell out words with which your transcriptionist may be unfamiliar. It saves time and guarantees that the correct words are transcribed. It likewise is well to dictate punctuation in involved sentences and paragraph endings.
- 12. Remember that your transcriptionist is a human being who works for a living by doing your work—who desires to do your work the way you wish it, but one who also is not clairvoyant.

#### Effective Transcription

Transcribing what the dictator has placed on a record requires that the transcriptionist coordinate the dictation and the typing—mechanically and mentally. Transcription requires more mental and physical coordination and effort than does typewriting by itself.

The effective transcriptionist must have certain prerequisite skills and knowledges totally apart from the typewriter and the transcribing machine. She must know how to spell correctly the words of a large general vocabulary, the special words in the vocabulary of the business for which she works, and the unusual words to which her employers (the dictators whose dictation she transcribes) is addicted. When necessary, she must know where and how to look up words. In addition, the effective transcriptionist should be thoroughly familiar with English grammar, punctuation, and English usage. If the dictator, in his concentration on the subject of the dictation, confuses his tenses or his plurals, neglects to pause, lowers his voice or dictates a period (.), the transcriptionist should recognize the situation and correct it instead of woodenly defending herself later with "Well, that's what you said. I'm not a mind reader." Furthermore, she must have an artistic sense about letter forms, manuscript practices, and tabulation. These should have

been acquired in Typewriting and Office Practice Courses.\*

The essentials of Dictating Machine Transcription can be mastered in about an hour by any typist who has the above prerequisites and whose typing is fast and automatically accurate. Fair transcription skill can be accomplished in a few weeks and eventually the transcriptionist's transcribing rate on clearly dictated recordings will reach approximately 85 to 90 percent of her typing-from-copy rate. The writer is aware that it is claimed that certain dictating machine transcriptionists transcribe at rates equal to or greater than their straight copy typing rates. These claims may be true, but such cases would be the exception rather than the rule.

If the prospective transcriptionist can spell, can use and recognize good English, knows how to lay out an attractive page, and can type accurately and well, she is ready to undertake the two phases of dictating machine transcription. The first of these is the mechanics of the transcribing machine. These, nowadays, are so simple that a manufacturer's representative, a superviser, or a teacher, can in about thirty minutes show the new transcriptionist how to:

- 1. remove recordings from cartons
- 2. put recordings on the machine
- 3. use hearing tubes
- 4. start and stop the transcriber
- 5. regulate the loudness of the recording
- 6. regulate the speed and pitch of the recording
- 7. backspace the recording
- 8. remove the recording from the machine
- 9. care for the recordings
- 10. file soundscriber disks
- 11. care for the transcribing machine

#### Transcription Practice

The second phase of transcription is actual transcription practice. Transcription practice means PHRAS-ING. Phrasing consists of (1) breaking dictation into listening units, and (2) typing continuously and steadily. Many dictators will dictate at 125 to 200 words per minute — much faster than most transcriptionists can type. Obviously at these rates the transcriptionist cannot transcribe dictation as fast as it was dictated. Slowing the transcribing machine to retard the dictation so distorts the dictation as to make it unintelligible. Consequently the transcriptionist starts and stops the dictation—feeds the dictation to herself as fast, but only as fast, as she can transcribe it. The coordination of the frequent short bursts of dictation with continuous typing is the key to rapid and accurate transcription. The

transcriptionist who types steadily at 50 words per minute—always giving herself as much dictation as she can remember easily and accurately—produces more mailable copy and undergoes less of a physical strain than the transcriptionist who listens, then types at 70 words per minute, then listens, then types, then listens, then types. Stop-start transcription of the latter sort is fatiguing and tends to destroy the sense of the over-all content and frequently results in tardy recognition that a correction in the dictation should have been made.

The skillful transcriptionist learns to listen by phrases and sentences. The beginner, however, should listen to three or four words, stop the dictation, and start typing. When she has typed two words she should listen to four more words while she is typing the last two words of her first listening unit. When she has typed four more words, she listens to four more words, et cetera. Her typing will always be one to six words behind the dictation to which she is listening. In that way she is forewarned about ends of sentences, corrections indicated by the dictator, punctuation, et cetera.

Practice and more skill permit the transcriptionist to lengthen her listening units, to five words, then to seven, eight, nine, and maybe even ten or more. When she has reached the ten-word level, her typing will frequently be four to twelve or more words behind the dictation. The following diagram of the same material indicates how a good beginning operator and one who is rather well advanced would coordinate her typing with her listening. In the diagram, the copy surmounted with lines indicates the listening units for the typing which is shown separately as continuous copy.

#### A Beginning Transcriptionist's Phrasing

Listening Units:	The skillful transcriptionist's   dictation
Typing:	The skillful transcriptionist's
	is always   several words ahead   of her typing.  dictation is always several words ahead of
	The more skillful she is,   the farther ahead   her typing. The more skillful she is, the
	of her typing   is her dictation.

Listening Units:	The skillful transcriptionist's dictation is always	
Typing:	The skillful transcriptionist's	
	severa! words ahead of her typing.   The more skill	
	dictation is always several words ahead	
	ful she is, the farther ahead of her typing of her typing. The more skillful she is,	
	is her dictation.	
	the farther ahead of her typing is her dictation.	

<sup>\*</sup>For a complete and practical presentation of artistic layout, letter forms, and transcription procedure the transcriptionist is referred to Unit Eleven, Scientific Typewriting (Dvorak, Merrick, Ford, Dealey), American Book Company, New York, 1947.

With sufficient practice to enable her to listen to and remember from six to eight words, the transcriptionist acquires a sense of the dictation so that it becomes easier to type ideas rather than words. It must be understood that a good transcriptionist also listens to ideas rather than a fixed number of words. A good transcriptionist listens to longer units of dictation—5, 6, 7, 8, or 9 words—but each unit does not always have the same number of words.

It is advisable, before starting to type, to examine the dictation record slip that should be with every recording. If the record slip indicates dictated directions about the recording, or corrections in the dictation, those directions and corrections should be heard and understood before beginning the transcription.

#### Suggested Material

Many beginners and experienced transcriptionists will find the following Navy Training Films helpful:

Dictating Machine Transcription—Machine Operation—#1562a

Dictating Machine Transcription—Transcribing Technique—#1562b

The films were available from Castle Films, Inc., 30 Rockefeller Plaza, New York. The first film presents the phases of a mechanical operation of Dictaphones and Ediphones. The second film covers the transcribing technique (phrasing) at rates from 20 to 140 words per minute.

Many office dictators would find the Navy Training Film—Take a Letter Please, Mn 156c—(available from Castle Films, Inc.) both interesting and profitable.

## Business Machine Training for All Business Teachers

Equipment used in the business machines course should be similar to that in offices in the community.

By CHRISTINE STROOP Instructor of Business Education New Jersey State Teachers College Paterson, New Jersey

A thorough course in office machines should be required for the certification of all business teachers. Understanding the operation and use of many machines is essential if the teaching of bookkeeping, secretarial science, or general business subjects is to be completely meaningful. The bookkeeping teacher, for example, must understand the operation of bookkeeping and calculating machines in order to explain how the journal or the ledger is kept in many business concerns. The teacher of typewriting must be prepared to explain the operation of various duplicating processes. The teacher of junior business training should understand the principles of punch card systems so that he can explain to classes why government checks, cards for magazine subscriptions, and similar cards must not be bent or torn. every business transaction involves the operation of one or more machines.

For this reason, the New Jersey State Teachers College at Paterson requires that all students who plan to teach business subjects complete a course in business

machines. In fact, at the request of elementary teachers, a course in machines is now being offered for them. It includes typewriting for personal use, filing, and the operation of three types of duplicating machines. Certainly, all teachers can profit from such a course. It may be helpful to other teacher-training institutions to know how this essential need of all business teachers is being met at Paterson.

## Capitalizing on Experience and Interest of Students

The business machines course is offered in the Junior year and is required of all students majoring in business education regardless of their previous training in business machines. This means that some of the students have had excellent high-school training while others have had very little or no previous machines training. Almost every member of the class, however, has had actual experience in operating some of the machines, because one of the requirments for graduation is the completion of the equivalent of two thousand hours (50 forty-hour

weeks) of paid office and store experience. During the period of this work experience, the student almost invariably learns to operate some business machines efficiently.

Student interests are even more varied than their past experiences. Some of them plan to teach in the book-keeping or accounting field; others, in secretarial science; and still others, in the field of general business. Nevertheless, all hope to be prepared at graduation for the initial position which may be available and attractive to them in terms of location and salary regardless of their avowed interest.

Minimum performance requirements are set to compensate for the variations in previous training and preference. Students who already satisfy the minimum requirements are urged to become expert on several machines. Students are encouraged to share with each other their experiences with business machines. They do this through class discussion, demonstration, and bulletin board exhibits.

#### Determining Degree of Mastery

Although the past experience and interest of each pupil will determine to a great extent the degree of mastery he will achieve, all students are required to pass a simple performance test on every machine. After the student has passed the performance test, he must instruct another student or group of students in the use of that machine. In this way, the student demonstrates his complete knowledge of the machine. At the same time his own learning is reinforced by this teaching experience.

Each student is also expected to become familiar with as many different machines as possible. This may be done through: (1) library research, (2) visits to offices, (3) contact with various office equipment companies which have been very generous in arranging demonstrations and in sending advertising materials, (4) attendance at the National Business Show, and (5) student initiated activities. Students place descriptions and pictures of the machines on cards which are filed by them and which may be used as future teaching aids. At least one picture of each business machine, which teachers may borrow for use in their classes, is kept at the College. Students continually contribute to this permanent lending collection.

#### Using Bulletin Board and Visual Aids

During the course, the bulletin board is divided into three sections. One section is filled with pictures of machines which are not in the laboratory. Another part displays samples of work completed by members of the class. The third section is devoted to hints on office management, secretarial training, business ethics, and use of the telephone. This section frequently contains cartoons and nonsense poems, which help to create interest in this phase of the work. Various student committees are in charge of these sections each week and try to outdo each other in presenting unusual displays.

Demonstrations by students, instructors, and guests are given frequently. Equipment and filing companies give demonstrations of machines and equipment that are not available anywhere in the College. Students are assigned to the College offices to observe machine operators. This gives them another opportunity to observe the use of machines in a business situation.

From the many motion pictures and film strips which are available, several are selected for use each term.

#### Integrating with Other Courses

Every atempt is made to tie office machines in with other courses in the student's program. The machines are available at all times for the use of students in the preparation of materials for other courses. Accounting students frequently use the calculating machines. The typewriters are in constant use for work on reports and term papers. Business students are frequently asked to duplicate reports which they have prepared for lecture courses so that all members of the class may have copies. Programs and bulletins for club and class meetings are prepared. The stapler, paper cutter, and other simple tools, which belong in the realm of business machines, are in constant use.

Information gathered in business organization and management classes is used by students in preparing office management or secretarial training projects. Last year, for example, one student did an excellent job of summarizing in a one-page illustration the traits and skills needed by the efficient secretary. A stencil was cut and duplicated copies were made for members of the shorthand classes, the office staff, and the class in office machines. Another student made a study of employment opportunities in office positions as revealed in the "Want Ad" section of the newspapers. In these ways students are enabled to see how business machines function in the operation of business.

## Developing Personality Traits

The informal manner in which the course is taught offers an excellent opportunity for students to learn to work with others. Because almost all of the assignments are on an individual basis, the student has ample opportunity to develop initiative and leadership. Much of the required work is done outside of the regular class periods and thus the student learns to work out many problems on his own.

In addition to this incidental training, lecture periods are devoted to such topics as business ethics, personality growth, obtaining and advancing in an office position,

(Continued on page 42)

## Office Practice in the Schools

It would be wise to acquaint students through demonstration or direct use with the new type devices in the office practice course.

By PETER L. AGNEW
Associate Professor of Education
New York University, School of Education

Office practice courses generally are designed to assist the pupil in mastering specific office techniques not found in other courses; to help the pupil to develop his personal qualities in order that he might be successful with his work and advance as rapidly as possible; to give the student an introductory knowledge of the operation and use of some of the more commonly used office machines; to maintain and further develop knowledges and skills that have been learned in other courses; to help the student develop his personal qualities particularly those so important to success in business offices; and to give the student this experience in a room equipped as nearly as possible like an office and to have the student learn this office practice work through the solution of problems that as closely as possible represent life-like office situations.

#### Secretarial Office Practice

Students entering the secretarial office practice course should have had typewriting and shorthand and the usual basic business subjects found in most good high school business curricula. It is also wise for students to have a year of bookkeeping. The rooms in which the course is offered should be considerably larger than the ordinary classroom and should be adequately equipped. The course should start with a consideration of secretarial duties and responsibilities-in short, a preview of the job of the secretary. Very early in the course the student should be made aware of the fact that personality plays an important part in the success of the secretary. The various phases and factors of personality should be discussed freely with the students and after they have been given due consideration the students should be encouraged to check one another's personal qualities so that each may know what the remainder of the class think of him. This kind of checking, if well handled, will tend to result in having each student completely aware of his strong points and weak points and with the proper encouragement may find it possible to improve those qualities in which he needs strengthening.

The secretarial office practice course should also provide a discussion of the techniques involved in taking

dictation and in transcribing. The discussion on dictation should include what to do at the beginning of the day in anticipation of dictation, the way to respond when called for dictation, the numerous things that should be done while taking dictation, and the little niceties that are so important in leaving the dictator after the dictation period is over. The discussion on transcription should include deft organization in anticipation of transcription, a review of letter style and placement, some typewriting technique, erasing, a check up on a knowledge of carbon paper and its use, and a review of many of the elements of grammar, punctuation, and word usage. The secretarial course must also include a reasonable amount of training in the operation and use of dictating machines, duplicating machines, adding and calculating machines. Among these machines the student should certainly become reasonably proficient in the operation of the stencil duplicator and in the operation of the gelatin and fluid machines. He, of course, must become very proficient in the preparation of stencils and masters for use on these machines. The student of secretarial office practice should learn to operate the transcribing unit in the dictating field through the transcription of practice records and regularly dictated records. If time permits some knowledge of the dictating unit and the shaving unit should also be taught.

With the present development of new types of recording devices, it would be wise to at least acquaint students through demonstration or possibly more direct use with the new types of recording devices, including disk recorders, wire recorders, and tape recorders. They should also know something about the electronic ediphones and dictaphones as well as the acoustical machines that have been in existence for some time. The student should also learn a reasonable amount about the operation of the full keyboard adding machine, the crank or rotary type calculating machine, and the ten-key adding listings machine. The key driven calculating machine is of considerably less importance to the average secretarial student, but an introductory knowledge of this may be of some value to him.

Special typewriting technique should be introduced in

this course particularly applied to the preparation of reports-business and financial, the preparation of legal papers, the preparation of rough drafts, the typing of final copy from rough drafts, and the preparation of a multitude of other business forms that are in common The secretarial course should in addition include a basic knowledge of some of the financial procedures in which the secretary might well be asked to engage, especially such items as keeping a checkbook, keeping a simple record of cash received and paid out especially by the individual, knowing something about recording investments and insurance policies, and taking care of banking relationships including deposits and withdrawals, and reconciling a bank statement. Toward the end of the course, the student should be given an opportunity to discuss with the group under the leadership of the teacher any problems involved in seeking employment in civil service and in private industry. Job requirements should be freely discussed along with dramatization of person interviews. The problem involved in preparation of letters of application and common business forms should be presented to the students. An opportunity to actually take some of the types of tests now being given in business offices to assist office managers and personnel managers in the selection of new employees is advisable.

While a course in office practice for secretarial students has become a very common and customary part of the curriculum for secretarial students, a similar type of course while strongly advised has not become a widely used type of course for non-secretarial students except in a relatively few areas of the country. It is, however, apparent that students who are to enter into other types of office occupations should also have a broadly conceived type of course experience during their terminal year in high school which will have as its basic objectives much the same objectives that were outlined in general terms for the secretarial course.

Editor's note: In the next issue of UBEA Forum, Dr. Agnew will discuss general clerical and specialized clerical courses designed for non-secretarial students.

Many print shops are installing typesetting machines which require the services of a typist. The typist prepares a ribbon stencil which when fed into the Linotype sets the castings or slugs automatically and in less time than required by the man-operated machine. It is anticipated that the new machine will reduce cost of printing by speeding up production. Editors may be permitted to furnish their own typists for technical jobs.

The Typovox has been invented by a tool company machinist and home tinkerer, George Coffee. Mr. Coffee's invention is a talking typewriter which, if marketed, should be of value in teaching blind persons to operate a typewriter.

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#### Lewis

(Continued from page 34)

duplicator; how to change the ink pad on the stencil duplicator, how to replenish the fluid in the fluid-type machine, how to get heavier copies by slowing up the running, how to remedy some of the difficulties which are liable to confront the operator of all three types of machines — fluid, gelatin, and stencil.

## Illuminated Drawing Board Instruction

A relatively short time should be spent on this phase of the work; but if a mimeoscope is available, some practice should be given to acquaint pupils with the use of the drawing board. It is suggested that a fundamental lesson (which should take only a short time) be given to the entire class. The mimeoscope could be placed on a desk or table where all can see it. The teacher should discuss the use of the board and its physical features before demonstrating how to attach the stencil, how to plan and arrange the layout, how to use the various styli, how to shadow with the screen plates, how to use the letter guides, etc. After this general discussion, each pupil should be assigned practice work and job work. The type of job work assigned should be based upon the most important uses of the mimeoscope in the community served.

With duplicating machine training comes its concomitant — job work from the administrative offices and other departments in the school — and it takes courage on the part of the instructor to say "no" to job requests which are liable to usurp the time of instruction. However, just as much a responsibility as teaching is the instructor's task of educating fellow workers and administrators to an awareness of the difference between real duplicating machine training as planned by a good teacher and submergence of well-planned teaching due to too many extra duplicating jobs.

## Stroop

(Continued from page 38)

use of the telephone, office layout, and office routine. All students are required to pass an examination on this phase of the course.

Equipment used in the business machines course for teachers should be similar to that used in the high schools and the offices in the community in which he is preparing to teach. Consequently, there is always a need for new equipment. It is the responsibility of the teacher to see that the proper administrative officers realize the value of the business machines course and are therefore willing to justify the budgeting of considerable money for the purchase of this expensive equipment. This convincing of administrators is a very relatively easy task for the successful teacher.

The class in business machines is in the unique position of rendering service to the faculty, the office staff, and the administration without exploiting the students.

Selling the administration on the need for equipment, however, rarely solves the immediate problem. Even after orders are approved and placed, it takes considerable time for equipment to be delivered and installed. During this period, it is necessary to improvise and to make use of every scrap of available equipment.

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Last year, for example, enrollments were greater than ever and equipment was difficult to obtain. The building was searched for any equipment that was not in constant use. The office staff cooperated fully by allowing students to come into the offices for instruction on machines that could not be moved and by lending other machines for use during class periods. An old discarded duplicating machine was reconditioned and put into use. Impressive, two-color work was produced on this machine.

How can a prospective business teacher become a completely successful teacher without having completed a practical course in business machines?

#### **Basic Business**

(Continued from page 9)

vital connection between school work and real life that is found in every well-taught general business class. The line of division is broken when a large cross-section of the school population is enrolled in at least one general business subject. Economic geography, business law, economics, and junior business training should all serve in uniting commercial students with the rest of the school.

4. The provision of exploratory experiences that will guide students into business occupations that require high school or post-secondary business education. Here junior business training is in an advantageous position. The growing tendency for educational authorities to recommend this subject for all students places a responsibility on its teachers to provide a course that will point out the advantages of vocational business training and also stimulate interest in other general business subjects in later high school years. A good program in junior business training maintains a balance between training in fundamental business skills and units of the social-business type. The combination provides experiences vital to future business training and so valuable as to be unique among all courses of the school.

Business educators must not consider themselves as champions of only one type of business training, for there should be no competition between the two phases of business work. An attitude in the business department that tends to treat any part of business training as of secondary importance may result in the transfer of that subject matter to another department of the school. Such a loss is not merely a possibility; it has already happened in some schools. The result is a less effective business training program.

Skill development and social business activities do not compete for honors in the business field. They form a team and together enable the business department to fulfill its responsibilities in the fields of vocational, con-

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## **Typewriting**

(Continued from page 15)

office machine. The acquisition of this skill means using a typewriter or a business machine with a minimum of effort and a maximum of expertness.

3. Rhythm and continuity of movement in typewriting are equally applicable to office machines. The student with the habit of correct stroking, touch, spacing, and the like, on either the typewriter or an office machine, will have acquired a habit which will result in a minimum of waste motions, thereby producing more acceptable work.

4. The habit of taking proper care of typewriters is equally important to all office machines inasmuch as it prolongs the use of equipment.

5. The ability to operate the typewriter with speed while retaining a high degree of accuracy is essential for the proficient clerical machine operator. Producing copy especially on a high production basis comparable to occupational efficiency is recognized both in typewriting and in office machine operation as one of the ultimate goals in business.

6. Opportunities are furnished in typewriting for the development of taking oral and printed directions. Efficient clerical workers also need to acquire the ability to follow verbal or printed directions.

7. Desirable attitudes such as industry, honesty, dependability, and cooperation formulate the basis for an efficient typist as well as for an efficient clerical worker. Concomitant traits such as poise and initiative carry over into more advanced stages of typing and clerical training.

8. The knowledge acquired in the form and arrangement of difficult phases of typewriting such as letters, manuscript work, institution and legal work, is directly carried over into all advanced phases of clerical training.

## Potter

(Continued from page 29)

## The Transcribing Machine

- 1. procure the cylinders or disks to be transcribed
- 2. select materials to be used
- 3. arrange and organize materials for use
  - (a) arrange typewriter, transcribing machine, paper and other supplies
  - (b) inspect cylinders for rush work
- check typewriter and transcribing machine for operation
- 5. place cylinder and index slip on machine
- 6. insert materials in typewriter
- 7. transcribe
  - (a) adjust volume and speed control to perfect hear-point
  - (b) listen to hear accurately
  - (c) type thoughts being spoken

- (1) judge length of materials for typing placement
- (2) choose correct words to express meaning
- (3) spell proper names and words correctly
- (4) if so directed, correct faulty expressions
- (5) punctuate correctly
- (6) listen for dictation errors as indicated on index slip and correct them
- (7) erase and correct typing errors
- (8) operate repeat mechanism of machine when necessary for accurate hearing
- (9) adjust speed of transcribing machine to typing speed so that typing is continuous and not erratic
- (10) use correct form in typing
- remove cylinder or disk and materials from typewriter
- dispose of cylinder or disk as prescribed by the office
- 10. present typed materials as prescribed by the office

As you can see, the weight of the use of the transcribing machines does not lie with the machine itself but with the transcription process. All of the problems one faces in the teaching of a shorthand transcription class

are present in the teaching of machine transcription. Typing skill, English ability, spelling, and punctuation as they are used in the transcribing process are all prerequisite to the successful operation of the transcribing machine. The machine is merely a substitute for the shorthand notes.

Any article or any book you read on the teaching of transcription can be applied directly to machine transcription. All of the principles of skill development we use in shorthand transcription are equally applicable to machine transcription.

The improvement of the skill in machine transcription is of great importance to many potential office workers. In the transcription pools, transcribers are paid on the basis of the number of lines they produce. What you teach students by way of machine transcription skill may determine how much income they can receive on the job. A well-planned, psychologically sound training program is a real need if we are to develop skilled workers in this area. Material graded in difficulty in all of the machine transcription elements (word usage, typing vocabulary, spelling, punctuation, typing forms), helps to develop a high facility in these skills as they are used in the machine transcription process; and measurement of progress and production are qualities of a sound training program.



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## Distributive Occupations

(Continued from page 11)

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- 6. Training for Responsibility
- 7. Supervising Women
- 8. Developing Initiative
- 9. Building Morale

This type of program can be built around any problems which are of concern to supervisors of business firms. The above is merely illustrative of one such program.

#### Kit of Supervisory "Tools"

The informations, skills, techniques and understandings acquired from the training programs described above serve to provide the supervisor in distributive occupations with "tools" which assist him in better meeting the responsibilities inherent in his job.

That these "tools" or supervisory techniques are effective has been demonstrated by their use in business by the many thousands of supervisors who have been enrolled in these training programs.

## Weiss

(Continued from page 32)

- II. All work should be on a practical basis and business forms should be used throughout. Copies of printed forms may be obtained from various large business concerns and reproduced in the school with the duplicating equipment available.
- III. Keyboard Charts for the various machines are not available but can be made by the instructor. These charts should indicate the correct fingering to be used.
- IV. Problems and procedures should simulate those encountered in business. Business concerns as a rule are glad to furnish material. Students who obtain jobs as bookkeeping machine operators may be asked to send to the teacher a write-up of the procedures used in her company; a compilation of which will provide ample variety for class work.
- V. Each student should be given a folder in which he can keep all completed work, tapes and ledger cards. On the outside of this folder a progress chart can be drawn so that the student may keep a complete record of the speed and accuracy of his work.
- VI. Speed posting tests can be given once a week. Tenminute tests are satisfactory. The student records the number of accurate postings completed in each test and can note his improvement.
- VII. Only the initial drill in posting should be to a single account. Thereafter, posting should be to a minimum of two accounts so as to give the student drill in removing and inserting ledger cards.

#### Conclusion

The question is often broached, "With the large variety of bookeeping machines available, is it worthwhile to train bookkeeping machine operators to become vocationally competent on one or even two models of machines?" I am certain that it is practical. At Central Commercial High School, it has been found that many students obtain employment on the same model machine on which they have been trained. In such cases, the students become competent operators after only a few hours of work necessary to acclimate themselves to the exact set-up used in the business concern. A certain degree of on-the-job-training is necessary in the case of students obtaining employment on a machine different from the model or models upon which they have been trained. In the follow-up of these placements, I have been assured by the employers that the training period required for these students was from one-fourth to one-fifth the time required for persons unfamiliar with machine bookkeeping. Furthermore, the background of the trained student is such that he makes a far better operator than one who will merely learn the one set-up by rote. I know of no scientific experiment conducted to bear out the above statements. I must, therefore, rely wholly on the ever continuing requests of employers for more trained operators as the basis for an expanding program of teaching bookkeeping and billing machines.

## Bryan

(Continued from page 31)

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chines are more vocational in nature, because they are operated in a touch principle requiring more skilled manipulation.

#### Related Learnings

If skill in machine operation were the only educational value acquired through machine instruction, it is doubtful whether such instruction could be widely given in schools. Skill in machine operation is only one of the educational values deriving from such instruction.

There are also related learnings that are most evident to all business teachers who have had experience in teaching office machines. Calculating machine instruction provides a vitalized learning of business arithmetic. Students secure better understanding of percentages, discounts, interest and many other problems. Addinglisting machines give reality methods of proof, accounting and bookkeeping routines, and the use of these in various lines of business. Such related learnings in calculating and adding-listing machine instruction can be compared similarly to the related learnings teachers have found in teaching transcribing machines; such as, a better training in spelling, punctuation, business English and typing.

#### Clerical Job Competence

Eminent business educators have frequently emphasized the fact that the greatest number of jobs in business offices are in the clerical field. No longer can business education confine its curriculum to shorthand, typewriting and bookkeeping. It is a fact that graduates of schools who have been trained as bookkeepers, typists or secretaries, in many cases, are initially employed in a clerical capacity in order to eventually reach the job for which they were trained. Many schools, recognizing this situation, are adding clerical training to their business education curricula.

One of the important parts of clerical training is office machine instruction; particularly, calculating and adding-listing machine operation. Students trained in the operation of such equipment improve their competence to hold a clerical job.

When we consider that in business offices there is work for payroll clerks, invoice clerks, cost clerks, statistical clerks, accounting clerks, etc., and that all of these jobs require some use of calculating and adding-listing machines, we must realize that training for such jobs can be improved by teaching the operation of that type of equipment.

As the great need for clerical training becomes universally known competent educational authorities will undoubtedly develop courses as instruction which will not only cover clerical duties not concerned with machines, but also will include machine instruction in the field of calculating and adding-listing machines which machines are so important a part of all clerical jobs.

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## NBE Test Program

(Continued from page 25)

should have more important places in the curriculum.

Have you noticed the statistics on page 26 of the May number of the UBEA Forum, contributed by the Seattle chapter of Noma? Previous surveys have shown that the distribution of office labor in one part of the country is like that in any other: Seattle, Atlanta, Los Angeles, Cleveland, Boston, Eight per cent of the workers are filing clerks, seven per cent are stenographers. Shouldn't filing be as much a part of business education as stenography? Fourteen and a half per cent of the workers operate calculating machines. Shouldn't machines (plural) operation be a larger part of business training than it is at present?

What the Joint Committee would like therefore, is a smaller percentage of stenography people, not as a result of less people participating in this test but because of a larger number enrolled in the other four skill tests.

Fundamentals and General Information. Many school people ask what the purposes of these two tests are. The answer is that it takes more than a knowledge of a skill to make a good operator in the particular skill. Personality and dependability are needed. but are not measurable yet by any device used by the Joint Committee. Another desirable quality is measurable, and this has to do with how well a person learns and retains from that which is taught him as well as from

his contacts with people, reading, movies, radio.

The Fundamentals Test uses samples in mechanics of language such as spelling, plurals, punctuation, arithmetic and social science. This test is based entirely on school taught knowledge. The General Information test uses samples of information which a person will "pick up" through being interested in a well rounded way in what is going on around him.

In Fundamentals the top possible score is 57. The top score earned was 52, but 48 is at the 99th per centile. The median was 34 and the middle 50% were grouped between 29 and 39.

No minimum acceptable was applied to this test, the requirement being that a person must score at least 30 in the Fundamentals and General Information together.

The General Information Test carried a possible score of 24, and 23 was scored by one high school student. The median was 7 and the range of the middle 50% was from 4 to 10. The 99th per centile scores were 17 and above.

In connection with this test there arose an interesting situation when a Canadian school enrolled. Nearly half of the questions were applicable to life in these United States. Can we expect our Canadian friends to keep posted on "portal to portal," OPA, and our postal regulations?

The median of 7 in the test was earned by 11 right minus \( \frac{1}{3} \) of 13 wrong (11-4=7); so the median expectancy by United States pupils

was 11 correct out of 24. If one assumes that 10 questions are typically U. S., then the Canadian pupil could be expected to get those 10 wrong. He had four choices of answer on each question, so if he guessed, he was likely to get 3 right and 7 wrong, so his score on the 10 would be 3 right minus  $\frac{1}{3}$  of the 7 wrong, (3-3=0)or zero. So, it could be expected that the Canadian pupil would score three points less on the general information than the United States pupil, and that is just exactly what happened.

Recommendations. Persons whose reading is confined to one feature, like comics, or sports, are not well developed mentally, nor is a person whose radio listening is confined to one kind of program. It should be recommended that in guidance counselling, pupils be made to realize that a variety of interests give a person a variety of information, give him a better balance socially as well as a better chance for advancement in business. When it is said: "It should be recommended" it should also be stated that it is believed that schools are already trying very hard to widen the mental horizon of their young people.

H. E. COWAN

## Have You . . .

Written to Remington Rand, Inc., for your free set of model letters? See November issue of UBEA Forum, page 30.

... Invited other business teachers to become active members of UBEA? Read again the section, "Think ... Plan ... Act," page 24.

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# FBLA Forum



## Mercer's Job Placement Program

By Carl J. Woolf

The chapter at Mercer University, Macon, Georgia, has completed plans for the establishment of new registers for the job placement program of the University, and action has already been taken in that direction.

According to announcement by Ray Harris, president of chapter 107, a special committee which was appointed at the beginning of the quarter, has adjourned and turned its recommendations over to the college administration. The first step taken was the registration of every student on the campus, with questionnaires being filled out to indicate availability, experience, field of interest, and scholastic preparation. The clerical work of this task was performed by members of the club.

To supplement news releases on the new program, five hundred letters were mailed out to various middle-Georgia business firms, inviting them to make use of the employment service.

The FBLA Committee, headed by Carlton Ivey, has been working closely with the college administration, carefully studying various plans of other employment services. Beginning December 1, the project was officially turned over to the University, with Dean Richard C. Burts, Jr., in charge.

In order to be sure that the Bureau continues to function, the club appointed a permanent advisory committee which we attempt to represent the students in smoothing out difficulties that may later arise. This committee consists of Carl Woolf, Hamilton Kellam, and Walker Whittle.

President Harris warmly praised the club members who helped in the work. "They have worked carefully, and given time without reservation when necessary. I think their work will be appreciated more and more by the administration and students alike," he said.

## FBLA Chapters Organized Recently

Hillsboro High School, Hillsboro. Oregon; Central High School, Pennington, New Jersey; Seaman High School, Seaman, Ohio; Bethel High School, Bethel, North Carolina; Durham High School, Durham, North Carolina; Harvey High School, Painesville, Ohio; Boyertown High School, Boyertown, Pennsylvania; Phoenixville Senior High School, Phoenixville, Pennsylvania; Bloomsburg High School, Bloomsburg, Pennsylvania; Heath High School, Paducah, Kentucky; Charlotte High School, Punta Gorda, Florida; Tell City High School, Tell City, Indiana; Meadow Bridge High School, Meadow Bridge, West Virginia; and Dillon High School, Dillon, South Carolina.

## Greensburg Chapter Alive and Active

H. E. Sherfey, organizer and sponsor of Chapter 84, Greensburg High School, Greensburg, Indiana, claims that the monthly luncheon is proving to be a popular project with the members. These luncheons are held in the school cafeteria. Members of the high school faculty and administrative staff, businessmen, and special speakers are invited to the luncheons.

Another project of the Chapter is that of giving awards in typewriting, shorthand, and bookkeeping. In each of the typewriting classes, the first five pupils to write 30 words, net, per minute for ten minutes with 0-5 errors receive a certificate and a pin. Then the number of words is increased by 10 for the various degrees of proficiency. Awards in other subjects are based on grades. The five highest in each division at the end of the year will receive cash prizes.

To obtain money for the awards, members of the Chapter sell school supplies such as pencils, typewriting

(Continued on page 50)

Joe Williams, immediate past president of the Mercer University FBLA Chapter, Macon, Georgia, has been named president of the Georgia Federation of College Business Students Association.





Dr. M. E. Studebaker, Indiana State Chairman of FBLA, was a recent guest speaker at the monthly luncheon of the Greensburg Chapter. H. E. Sherfy, Chapter Sponsor, is on Dr. Studebaker's right.



Jane Gay, May Ellen Henneberger, Betty Byers, and Peggy Comins are business education majors at the Women's College of the University of North Carolina, Greensboro. They and other members of their group assist the State FBLA Chairman, Miss Evelyn Fowler.

## North Carolina to Hold FBLA Day By Peggy Comins

FBLA in North Carolina is centered in the Business Education Department of the Woman's College of the University of North Carolina in Greensboro. The students under the direct guidance of the state chairman,

Evelyn Fowler, have assumed the responsibility for this function. Since the business education majors go into the state as teachers and coordinators of clerical and distributive training and as secretaries, the educators and business women of the future enhance their own knowledge while serving the high school FBLA chapters of North Carolina.

The Statesville High School was granted the first chapter charter in North Carolina. This and other petitions for charters are rewards for the tedious work that has gone into the plans for organization. Constitutions were duplicated and, with individually typed form letters, were mailed to various schools.

Under the general direction of Vance T. Littlejohn, the Business Education Department at Woman's College is planning even bigger things for the year. We anticipate rapid expansion of the FBLA program throughout the state and are looking toward a state-wide FBLA Day on the Woman's College campus.

#### SBEA Convention

(Continued from page 22)

Moorman, University of Florida, Gainesville, Florida; Eugenia Moseley, George Peabody College for Teachers, Nashville, Tennessee; Lula B. Royce, Columbia High School, Columbia, South Carolina; R. Norvell Garrett, Southeastern Louisiana College, Hammond, Louisiana; Ruth Thomas, University of Kentucky, Lexington, Kentucky, and Mary Virginia Moore, West Virginia Wesleyan College, Buchannon, West Virginia.

Officers and directors elected to succeed those whose terms expire in July 1948 are: president—C. C. Dawson, Mississippi Southern College, Hattiesburg, Mississippi; first vice-president—C. C. Steed, Elizabethton School of Business, Elizabethton, Tennessee; second vice-president—Lula B. Royce, Columbia High School, Columbia, South Carolina; directors—Gladys E. Johnson, Senior High School, Little Rock, Arkansas; Mary

Helen Dodson, Alabama Polytechnic Institute, Auburn, Alabama; F. De-Vere Smith, University of South Carolina, Columbia, South Carolina; G. H. Parker, University of Tennessee, Knoxville, Tennessee; M. L. Landrum, State Teachers College, Farmville, Virginia; and Marion Lamb, West Liberty State College, West Liberty, West Virginia. Parker Liles, Supervisor of Business Education, Atlanta, Georgia has been named editor of Modern Business Education.

The Association accepted an invitation to hold its next annual meeting at the Roosevelt Hotel, New Orleans, Louisiana.

## Greensburg

(Continued from page 49)

paper, notebook binders, etc. This year a rental system was established for textbooks of the new adoption. The textbooks were purchased from Chapter funds.

Other activities include an occasional party, business meetings, and committee meetings.

## General Clerical

(Continued from page 9)

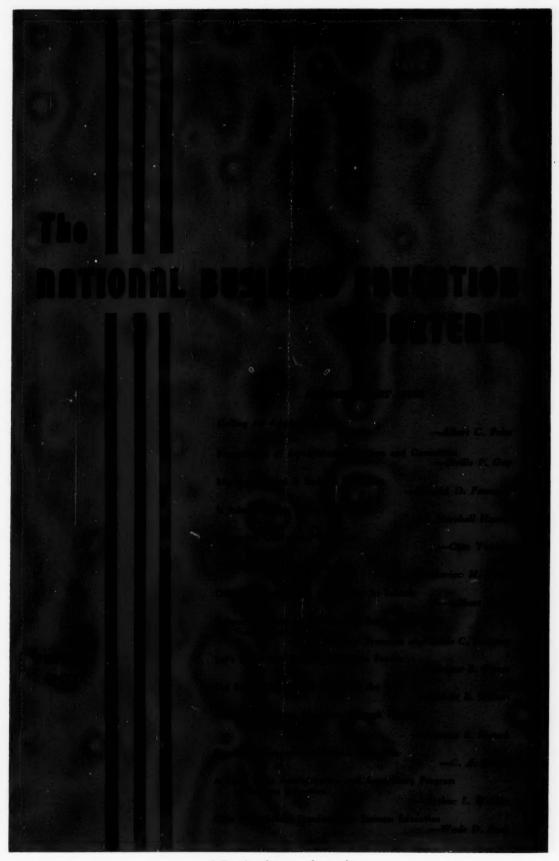
Their statement as to the machines they were called upon to operate agreed quite exactly wih th preceding statement from the offices as to machines used.

This group was asked to list the particular difficulties that they had encountered on the job. Their replies indicated that their chief difficulties concerned figure and sustained typewriting, filing, speed and accuracy in taking and transcribing dictation, nervousness about their work, using the telephone properly, remembering details, and English and spelling.

Since most of the items which the graduates listed as difficulties on the job are those things in which every business education department gives a great deal of training and attention, it is evident that the school program either fails to provide for the initial introduction to office work, or is not realistic enough in its approach to impress itself on the student. It is possible, too, that the school does not provide practice in the pressure-type of situation that confronts the worker in the business office, or that it does not provide sufficient practice in the type of individual responsibility for production that is found in the office. Instead, it permits the student to depend too much on the teacher for responsibility for the quality of the work done. Perhaps we as teachers should stop allowing the question "Will this do?" in our classrooms, and start insisting that the student learn to judge the quality of his own work and his own performance at all times.

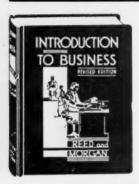
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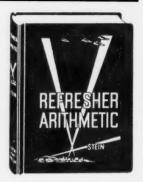
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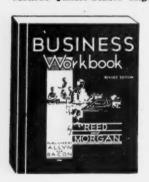


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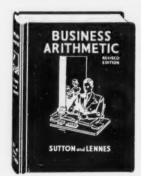
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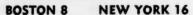


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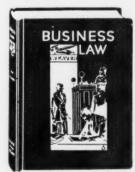
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